NOTE TO REVIEWERS OF THIS DRAFT

This document has been designed as an easily accessible reference manual and not as a report to be read through from beginning to end. Users, unlike reviewers of this draft, are unlikely to read it through from cover to cover every time they use it.
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Glossary

Corridors
Corridors are links between nodes, along which an increased intensity of development may be encouraged. Corridors provide efficient access to a higher level of economic opportunities than would generally be the case in less structured space. They typically include public transport routes.

Density
The number of units per unit of land area, e.g. dwelling units/ hectare. There are five measures of density:
- i. population density: people / hectare
- ii. gross dwelling unit density: dwelling units / total land area of a project or suburb including roads, public open space and non-residential land uses.
- iii. net dwelling unit density: dwelling units/land occupied by residential plots only.
- iv. building density: area of buildings / hectare.
- v. settlement density: (dwelling units/ total land occupied by settlement) also known as average gross dwelling units density.

Densification
Densification is the increased use of space both horizontally and vertically within existing areas/ properties and new developments, accompanied by an increased number of units and/or population threshold (CoCT, Draft SDF, 2009).

Efficiency
Development that maximises development goals such as sustainability, integration, accessibility, affordability, and quality of living, relative to financial, environmental, and social costs, including ongoing and future costs (Nelson Mandela Bay Municipality, 2007).

Food security
Physical and economic access, at all times, to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life. (http://www.fao.org/ag/wfe2005/glossary_en.htm).

Infill Development
Development of vacant or under-utilised land within existing settlements in order to optimise the use of infrastructure, increase urban densities and promote integration.

Integrated Development Plan
The strategic municipal development plan, reviewed on an annual basis, required by the MSA (Act 32 of 2000) which guides municipal decisions and budgets.

Land Use Management
Establishing or implementing any measure to regulate the use or a change in the form or function of land, and includes land development ($1, Land Use Management Bill, 2008).

Land Use Management System
A system used to regulate land use in a municipality, including a town planning or zoning scheme, or policies related to how land is used on a plot by plot basis.

Nodes
Nodes are areas where a higher intensity of land uses and activities are supported and promoted. Typically any given municipal area would accommodate a hierarchy of nodes that indicates the relative intensity of development anticipated for the various nodes, their varying sizes, and their dominant nature.

Scenario
A plausible and often simplified option of how the future may develop, based on a coherent and internally consistent set of assumptions about driving forces and key relationships (http://www.ipcc.ch/publications_and_data/ar4/wg1/en/annex1sglossary-p-z.html). Often a set of different scenarios are considered as part of the process of agreeing on a way forward.

Spatial Development Framework
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.

Sector Plans
Municipal plans for different functions such as bio-diversity conservation, housing, transport, local economic development and disaster management. They may also be geographically based, for example a sub-region, settlement within a local Municipality or a component of that settlement.

Stakeholders
Agencies, organisations, groups or individuals who have a direct or indirect interest in a development intervention or its evaluation (African Development Bank, et al, undated).

Town Planning Scheme or Zoning Scheme
A legal instrument for regulating the use of land in terms of provincial or national legislation, see Land Use Management System.

Urban Edge
A demarcated line and interrelated policy that serves to manage, direct and limit urban expansion (City of Cape Town, Draft Table Bay District SDP, 2009).
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABET</td>
<td>Adult Basic Education and Training</td>
</tr>
<tr>
<td>ABLSP</td>
<td>Area Based Land Sector Plan</td>
</tr>
<tr>
<td>CBA</td>
<td>Critical Biodiversity Area</td>
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<tr>
<td>CF</td>
<td>Concept Framework</td>
</tr>
<tr>
<td>COGTA</td>
<td>Department of Cooperative Governance and Traditional Affairs</td>
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<tr>
<td>CRDP</td>
<td>Comprehensive Rural Development Program</td>
</tr>
<tr>
<td>DEA</td>
<td>Department of Environmental Affairs</td>
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<tr>
<td>DFA</td>
<td>Development Facilitation Act (Act 67 of 1995)</td>
</tr>
<tr>
<td>DMA</td>
<td>Disaster Management Act (Act 57 of 2002)</td>
</tr>
<tr>
<td>DMR</td>
<td>Department of Mineral Resources</td>
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<td>DoT</td>
<td>Department of Transport</td>
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<td>DRDRLR</td>
<td>Department of Rural Development and Land Reform</td>
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<td>DWA</td>
<td>Department of Water Affairs</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EMF</td>
<td>Environmental Management Framework</td>
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<td>ESA</td>
<td>Ecological Support Area</td>
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<td>IDP</td>
<td>Integrated Development Plan</td>
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<td>IGRA</td>
<td>Intergovernmental Relations Framework Act (Act 13 of 2005)</td>
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<td>ISNSP</td>
<td>Integrated Sustainable Human Settlement Plan</td>
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<td>ITP</td>
<td>Integrated Transport Plan</td>
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<tr>
<td>IWMP</td>
<td>Integrated Waste Management Plan</td>
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<tr>
<td>HSP</td>
<td>Human Settlement Plan</td>
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<td>LED</td>
<td>Local Economic Development</td>
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<td>LUMB</td>
<td>Land Use Management Bill, 2008</td>
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<td>LUMS</td>
<td>Land Use Management System</td>
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<tr>
<td>MINTEK</td>
<td>National Mineral Technology Institute</td>
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<td>MTIEF</td>
<td>Medium Term Income and Expenditure Framework</td>
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<td>MSA</td>
<td>Municipal Systems Act (Act 32 of 2000)</td>
</tr>
<tr>
<td>MEC</td>
<td>Member of Executive Council</td>
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<tr>
<td>NDPG</td>
<td>Neighbourhood Development Partnership Grant</td>
</tr>
<tr>
<td>NEMA</td>
<td>National Environmental Management Act (Act 107 of 1998)</td>
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<td>NEMBA</td>
<td>National Environmental Management: Biodiversity Act (Act 10 of 2004)</td>
</tr>
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<td>NHA</td>
<td>National Health Act (Act 61 of 2003)</td>
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<td>NHRA</td>
<td>National Heritage Resources Act (Act 25 of 1999)</td>
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<td>NLTTA</td>
<td>National Land Transportation Transition Act (Act 22 of 2000)</td>
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<td>NSDP</td>
<td>National Spatial Development Perspective</td>
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<tr>
<td>PGDS</td>
<td>Provincial Growth and Development Strategy</td>
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<td>SAHRA</td>
<td>South African Heritage Resources Agency</td>
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<tr>
<td>SANBI</td>
<td>South African National Botanical Institute</td>
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<tr>
<td>SANParks</td>
<td>South African National Parks</td>
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<tr>
<td>SDF</td>
<td>Spatial Development Framework</td>
</tr>
<tr>
<td>SEA</td>
<td>Strategic Environmental Assessment</td>
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<tr>
<td>SPC</td>
<td>Spatial Planning Category</td>
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<tr>
<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities, Threats</td>
</tr>
<tr>
<td>VIPL</td>
<td>Ventilated Improved Pit Latrine</td>
</tr>
<tr>
<td>WSA</td>
<td>Water Services Act (Act 108 of 1997)</td>
</tr>
<tr>
<td>WSDP</td>
<td>Water Services Development Plan</td>
</tr>
</tbody>
</table>
- **Rural Areas and Rural Development**
  - population densities less than 150 people / km²
  - dwelling densities less than 1du/10 hectares
  - primary economic activities; agriculture, agro-processing, mining, tourism, resource extraction, water, energy

- **Urban Areas and Urban Development**
  - population densities greater than 150 people / km²
  - dwelling unit densities greater than 1du/hectare
  - settlement contained within an urban edge
  - services provided on a grid reticulation system
  - some primary; urban agriculture, building materials, resource extraction but mainly secondary and tertiary economic activity
INTRODUCTION TO THE GUIDELINES

(i) Purpose of these guidelines

This document presents a set of guidelines to assist municipalities with the formulation of Spatial Development Frameworks (SDFs) that:

a) Comply with the requirements of the Municipal Systems Act (Act 32 of 2000) and the National Environmental Management Act; and,

b) Reflect and implement the principles for spatial development set out in the Development Facilitation Act (Act 67 of 1995).

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.

These guidelines include practical advice on how to:

• ensure that the SDF is accessible to a wide audience;
• achieve support for the SDF from all stakeholders;
• write and illustrate SDF reports; and,
• propose spatial interventions that will effectively address common spatial issues facing municipalities and assist with achieving the desired spatial form.

(ii) Background to these guidelines

These guidelines have been prepared in response to the growing recognition that Spatial Development Frameworks (SDFs) are not assisting sufficiently with addressing the spatial inequalities and inefficiencies in our society. Old patterns of development that promote segregation and marginalization of especially the poor, and that deplete our resources to the benefit of a few, continue. This is in spite of a number of laws and policies aimed at facilitating integration, access to opportunities for all and the sustainable use of resources. In short, SDFs seem to reflect sound policies, but fail to effectively impact on the reality of our urban and rural areas (see Figure i).

The Department of Rural Development and Land Reform (DRDLR) has recently investigated the quality and status of SDFs throughout the country. (DRDLR, SDF, LUMS and GIS Audit, 2010) In addition, specific research focusing on the strength and weaknesses of municipal SDFs was undertaken in preparation for these guidelines. This research has shown that compilers of SDFs struggle with the following aspects:

a) Applying national and provincial spatial policies and principles and related planning concepts to the reality at the municipal level.

b) Formulating practical and implementable SDFs, with measurable targets that will allow for assessing the success of an SDF.

c) Aligning SDFs with other sector planning in municipalities and with the planning of neighbouring municipalities.

d) Achieving buy-in of SDFs, thus improving their status and role in guiding decisions made by municipalities.

(iii) Intended users

These guidelines are intended to be used by:

a) Municipal officials responsible for the formulation of SDFs, whether the SDF is prepared by consultants or in-house.

b) Service providers appointed by municipalities to prepare SDFs.

c) Councillors, as they are ultimately responsible for the preparation, approval and implementation of SDFs.

d) All stakeholders wishing to participate in formulating and implementing the SDF, such as developers and the public in general.

e) Municipal officials, officials from other government departments and professionals who will use the SDF.
f) Provincial and other government agencies who will assess and comment on SDFs.

(iv) Characteristics of a credible SDF

An SDF is an important municipal policy instrument provided for in legislation (Refer to sections 1.5 and 1.5.1 for details on the role of and legal requirements for an SDF), but it has been shown that merely fulfilling the requirements of the law will not result in an effective SDF.

Although the scope and contents of SDFs will vary for different municipalities, a credible SDF:

a) is based on an agreed vision and planning principles that promote equity and sustainability; for example:
- assisting with restructuring spatially inefficient settlements;
- promoting sustainable use of land resources;
- channelling resources to areas of greatest need (social investment) and development potential (economic investment); and,
- stimulating economic opportunities in rural and urban areas (White Paper 2001)
b) is aligned with relevant national and provincial policy;
c) reflects a clear understanding of the reality of the municipal spatial environmental, social and economic systems, particularly with regard to urban infrastructure needs and capacity;
d) provides sufficient detail to inform Council decisions that have a spatial dimension;
e) includes an implementation plan, with measurable targets;
f) is realistic in terms of growth prospects and the financial and institutional capacity of the municipality to implement the proposals;
g) is aligned with the municipal Environmental Management Framework (EMF), where applicable;
h) provides guidance for sector plans and development initiatives from all government agencies, e.g. land reform programmes, and private sector projects that will contribute towards the municipality’s vision;
i) enjoys a high level of buy-in from all stakeholders (i.e. the process of formulation is as important as the product);
j) provides guidance for the Municipality’s Land Use Management System (LUMS); and,
k) is clear, succinct and accessible to a wide audience, see figure ii.

The output of these first three phases informs, firstly, the conceptual framework that sets down the key ideas and focus areas, and secondly, the draft SDF. This phase may include an intermediate round of public participation if scenarios need to be considered. Support for the SDF must then be achieved after which formal approval, implementation and monitoring follow. Figure iv summarises the process as follows.

Phase 1: Start-up
Set up of institutional and political support structures, understanding of the role, agreement on the scope of work for the SDF, and completion of the project plan and inception report..

Phase 2: Issues & Vision
Agree with stakeholders on the spatial vision and issues. This phase precedes the status quo investigation, so as to avoid influencing the public by presenting “leading” information and to ensure that the subsequent work also considers issues of public concern, rather than solely academic approach that attempts to address a myriad of issues equally.

Phase 3: Spatial analysis and synthesis
Investigation and analysis of the status quo of spatial issues.

Phase 4: Draft SDF
Preparation of draft SDF proposals (first draft document on the table for comment)

Phase 5: Achieving support
Discussion of the SDF proposals with stakeholders.
Phase 6: Finalisation and approval of the SDF
Analysis of the comments proposals for amendments, finalisation of the SDF and approval the SDF by relevant authorities.

Phase 7: Implementation and monitoring
Implementation and monitoring of the SDF, and revision of the SDF, which should be coordinated with the IDP cycles.

The diagram in Figure iv is intended to be used to prepare a project plan and programme as part of Phase 1 (see section 1.3.2).

(vi) How to use the guidelines manual
This guideline manual is structured according to the phases of preparing an SDF as set out in Figure iv. This diagram is also used as a tracker diagram in the document at the beginning of each phase to orientate users as to where the phase being discussed fits into the overall process. As a result of many shortcomings identified in the preparation of SDFs these guidelines have gone to considerable detail in how to address the various tasks required to complete an SDF.

However, this is not intended to impose a monotonous and uniform product on every Municipality no matter what its context.

Municipalities must mobilise their own creativity as well as that of stakeholders in ensuring that scope for unique aspects of the Municipality are highlighted and given effect in the SDF.

Minimum requirements
The guidelines also recognize that the capacity and resources available to municipalities in South Africa vary significantly. Where appropriate the guidelines indicate the minimum requirement for specific tasks.

Technical notes
At the end of each stage technical notes are provided, which includes practical advice on how to achieve the outcomes of each stage.

(vii) Focus of the guidelines
These guidelines are intended for use by metropolitan (A), district (B) and local (C) municipalities. However, the requirements for the formulation of certain aspects of the SDF may differ for each of these types of municipalities. For example, predominantly rural municipalities have to deal with different issues compared to predominantly urban ones. Where appropriate, the differing requirements have been indicated for each type of municipality throughout the guidelines.

These guidelines are not intended to inform the production of Provincial Spatial Development Frameworks which fall within the scope of regional planning. Nor are they intended to guide detailed sectoral plans or urban design frameworks for the growth management of individual settlement precincts, or nodes within settlements. However, a local Municipal SDF should provide strategic guidelines for the drawing up of such frameworks or plans and this topic is addressed.

Figure iv Phases in the Process of completing an SDF
1. PHASE 1: START-UP

The start-up phase lays the foundation for the successful formulation of the SDF. This phase entails:

a) Getting political support for SDF formulation.
b) Setting up a steering and joint technical committee to guide the work.
c) Gaining clarity on the role, scale and requirements for the SDF.
d) Reaching agreement on the scope and plan of work.
e) Defining a critical assessment framework and principles that should inform all deliberations on the SDF.
f) Identifying the stakeholders who should participate in the formulation of the SDF.

1.1 Political support

It is crucial that the Council is involved from the onset in the formulation of the SDF and to keep them on board and informed throughout the process with regular presentations at Council meetings. This will assist with buy-in into the SDF proposals, and facilitating its implementation.

Ideally a Council Resolution should be obtained at inception of the process that Councillors will support proposed planning process and that they will participate in the process (e.g. ward Councillors to attend local area workshops).

1.2 The steering committee

The first step in initiating the formulation or revision of an SDF is to set up an institutional structure in the form of a steering committee that can oversee the SDF process and ensure that the responsible officials and/or consultants deliver on the agreed terms of reference.

1.2.1 Composition of steering committee

As a minimum the following persons should serve on the steering committee:

a) The Councillor responsible for spatial planning (chair)
b) The Municipal Manager
c) The Head of the Planning Department
d) The IDP Manager
e) A representative from the Provincial Department of Planning

The steering committee should meet at least every second month where the officials and/or consultants responsible for the preparation of the SDF will report on progress made. Proper meeting protocol should be followed, including keeping signed minutes of meetings (usually by an official from the municipal planning department or the consultants) and approval of minutes.

Ideally the steering committee should not influence the formulation of SDF proposals in its meetings. Rather members wishing to make substantive inputs should do this in the forums created for this purpose in Phase 2. However, the committee should oversee the quality of deliverables.

The role and functioning of the steering committee should be discussed and agreed to at the first meeting of the planning process.

It may be useful to convene the steering committee immediately after the Council has decided to embark on the formulation or revision of the SDF, so that the committee can participate in the formulation of the terms of reference for an in-house team or for service providers. Note that even if the SDF is to be prepared in-house, the process should be guided by an agreed terms of reference and a steering committee.

1.3 Joint technical committee

The joint technical committee is convened simultaneously with the steering committee. This committee is tasked with providing technical input into the SDF. In particular it should ensure that the SDF is informed by planning being
undertaken by the various departments within the municipality as well as other organs of government and private sector applications and that in turn the SDF will influence such planning and implementation.

1.3.1 Composition of the Joint Technical Committee
This committee should comprise the personnel who will actually do the work of preparing the SDF, i.e. the municipal officials and/or the consultants appointed to prepare the SDF, as well as representatives of all municipal departments that deal with matters that have a clear spatial dimension, including:
- Human Settlements (Housing)
- Community Services
- Local Economic Development
- Rural Development
- Finance
- IDP
- Transport
- Engineering Services
- Land use management and heritage resources
- Disaster management

This committee should be chaired by the municipal official responsible for the SDF (usually the head of spatial planning) and should meet at least monthly to discuss progress and technical requirements.

It is strongly suggested that, where possible, the SDP process should integrate with the IDP process already established.

1.3.2 Project Plan
The compilers of the SDF (either consultants or in-house planning and other departmental officials) should prepare a project plan, based on the agreed terms of reference and scope of the SDF, (see section 1.6), that sets out the:
- a) scope of work;
- b) programme for the SDF formulation, including deadlines;
- c) proposed public participation process and detail; and
- d) project administration arrangements.

This project plan should be presented to the steering committee for endorsement.

1.4 Use of Consultants

“Municipalities must realise that they should not rely solely on consultants to undertake the compilation of the SDF. It is the responsibility of the Municipal Manager, not the consultant, to ensure reasonable identification of issues, prioritisation, integration of projects, revision and sectoral participation”. (Provincial Government Western Cape. Spatial Development Framework Manual for the Western Cape Province. 2003 )

Most municipalities utilise consultants to assist with the formulation of their Spatial Development Frameworks. It is however critical that municipal officials are in control of the outcome and active participants throughout the process. At the end of the process, the municipality must take ownership of the Spatial Development Framework and should therefore have a very clear knowledge of the content and implications of the spatial development framework.

The municipality must develop a detailed Terms of Reference that gives a clear indication of the desired outcomes of the planning process and clearly spells out the roles and responsibilities of the consultant from the outset.

Town and Regional Planning is a specialised field that requires dedicated education and training. When appointing consultants, it is important to use only reputable and appropriately qualified professionals with proven experience in the field of spatial planning.

(source: Mpumalanga SDF Guidelines Toolkit, 2010)

1.5 Understanding the scope of an SDF

1.5.1 Legal requirements
The formulation of an SDF is a legal requirement, and the SDF should fulfil the requirements as set out in the relevant legislation.

These requirements should be summarized in the start-up phase of the SDF, to ensure that the scope of work is complete, and to empower stakeholders participating in the formulation of the SDF. This summary should form part of the background information presented during the first round of public participation. Table 1.1 provides a synopsis of the current legal requirements for an SDF.

Note: Legal requirements may change over time as legislation is amended or new legislation introduced, and this should be investigated as part of the start-up phase.

1.5.2 The role of the SDF
It is critical that all those involved in the formulation of the SDF should understand its role as official Council policy. This understanding should be presented in the introduction to the SDF document and shared with all stakeholder groups during the first phase of public participation.

The ultimate goal of the SDF is to achieve the desired spatial form of the municipality. This form is based on:
- the vision for the development of the municipality
- the principles set out in Chapter 1 of the DFA, (see section 1.9.)
- other relevant government policy
- available financial, environmental and land resources
1.5.3 Components of an SDF

The components of an SDF, as required by the legislation in Table 1.1 can be summarized as follows:

- The desired spatial form and pattern of land use for the municipality, which must be visually represented (i.e. a plan) (MSA Regs S2(4)(b), (c)(i) and (j)).

Aspects that must be shown include:

- The desired direction and nature of growth
  (MSA Regs S2(4)(c)(iii), White Paper on Spatial Planning and Land Use Management, 2001) – this should include vertical (in urban areas) and horizontal growth.

- Major movement routes

- Areas targeted for redressing past imbalances and spatial reconstruction

- Conservation of the built and natural environment
  (White Paper on Spatial Planning and Land Use, 2001; NEMA; SAHRA)

- Where particular land use types will be encouraged or discouraged
  (MSA Regs S2(4)(ij)ii), White Paper on Spatial Planning and Land Use, 2001).

- Areas where development intensity could be increased or decreased
  (White Paper on Spatial Planning and Land Use, 2001).

- Urban Edges
  (MSA Regs S2(4)(i)(ii)).

- Where development and infrastructure investment (both public and private) should take place
  (MSA Regs S2(4)(c)(i)).

- Where strategic intervention is required and priority spending should be directed
  (MSA Regs S2(4)(c)(iv) and (v)).

- Objectives, strategies and policies to achieve the desired spatial form
  (MSA Regs S2(4)(b) and (c)).

- Programs and projects for the development of land
  (MSA Regs S2(4)(g)).

- Guidelines for a land use management system
  (MSA S26(e), MSA Regs S2(4)(d), White Paper on Spatial Planning and Land Use, 2001).

- A capital investment framework
  (MSA Regs S2(4)(e), White Paper on Spatial Planning and Land Use, 2001).

- A strategic environmental assessment of impact of the SDF
  (MSA Regs S2(4)(f), White Paper on Spatial Planning and Land Use, 2001).

- A reflection on how the SDF is aligned with the planning of neighbouring municipalities and national and provincial policies and legislation
  (MSA S26(d), MSA Regs S2(4)(h)).

- A reflection on how the SDF gives effect to the DFA principles
  (MSA Regs S2(4)(a)).

1.5.4 Relationship with IDP

The IDP is the overall strategic development plan, prepared in terms of the MSA, that guide decision making, budgeting and development in the municipality. As the SDF has a pivotal role in directing municipal spending and; private sector investment, the SDF is a critical and integral component of the IDP. It is not merely a sector plan appended to the IDP. It shows how the implementation of the IDP should occur in space, i.e. it indicates where in the municipality all IDP projects will be implemented, in line with and to help achieve the desired spatial form of the municipality. The IDP should use the SDF to map its projects and understand their implications.

Therefore, the SDF should be prepared within the framework of the IDP and will both inform and be informed by the IDP. In this regard the public participation process for the SDF should be integrated with that of the IDP. This will be discussed further in Phase 2.

The timing of the preparation of the SDF in relation to the 5 year IDP cycle, will require careful consideration. Ideally the SDF should be prepared to be ready at the beginning of a 5 year cycle, so as to ensure that both long term and short term spending and programmes in the IDP are guided by the SDF, see figure 1.1.

Figure 1.1 Relationship with the IDP

As the SDF should also inform the sector plans that will be included in the IDP, it should be initiated sufficiently in advance of a new IDP cycle to inform the IDP components,

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1 Commonly referred to as land use management.
see figure 1.2. This timing will have to be coordinated with the IDP manager.

1.5.5 Relationship with Sector Plans
The IDP requires that a number of sector plans are produced. These have generally been prepared by the relevant line department directed at its own needs. The SDF was also hitherto considered as a sector plan serving the needs of the planning department. This state of affairs often resulted in misalignment between the sector plans. This guideline manual proposes that all the sector departments input into the SDF and that it should serve as the single coordinated framework for the spatial aspects of all of the sector plans.

1.5.6 Timespan of the SDF
The SDF presents a long term vision of the desired spatial form of a municipality, and thus is a critical informant to bulk infrastructure planning which normally has a 20 year planning horizon. Therefore, the long term spatial vision of the SDF should be for 15 to 20 year lifespan. The SDF itself could be revised on a more regular basis in line with the IDP cycles (section 7.3 deals with this aspect in more detail).

1.6 Hierarchical Differentiation of the SDF
The scope of the SDF will differ for each municipality, depending on the predominant nature of the municipal area, the complexity of the issues facing the municipality and the resources available to formulate the SDF.

1.6.1 Scope of SDFs for different municipalities
Table 1.1 below sets out the scope of work for different types of municipalities. In essence a hierarchical system of planning is suggested, which allows for the development of increasingly detailed, but aligned planning. The extent to which municipalities will require the most detailed levels of planning will depend on the nature of the municipality and complexities facing the municipality. Note that the eventual outcome of the exercise should be planning that provides sufficient detail for municipalities to guide land use management (i.e. decision on land use applications) and investment and budget decisions.
### Table 1.1 SDF SCOPE OF WORK

<table>
<thead>
<tr>
<th>Metropolitan Municipal SDF</th>
<th>District Municipal SDF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defines the settlement structure &amp; indicates roles of nodes/settlements between districts/regions within the metro</td>
<td>Defines the settlement structure &amp; indicates roles of settlements, transport and regional service infrastructure across and between local municipalities</td>
</tr>
<tr>
<td>Identifies growth areas and priority investment areas</td>
<td>Defines the linkages and corridors between settlements</td>
</tr>
<tr>
<td>Indicates areas to be protected such as the open space system in urban areas &amp; valuable agricultural land outside the urban edge</td>
<td>Identifies growth nodes, priority investment areas, and areas of rural decay</td>
</tr>
<tr>
<td>Describes urban design principles to be followed. More detailed scale SDFs and sectoral plans</td>
<td>Indicates areas of protection &amp; conservation such as biodiversity conservation areas &amp; valuable agricultural land</td>
</tr>
<tr>
<td>Prepared at 1:500 000 to 1:250 000 at A4 size</td>
<td>A key responsibility of planning at this level should resolve contradictions with planning visions between local municipalities</td>
</tr>
<tr>
<td></td>
<td>Describes urban design principles</td>
</tr>
<tr>
<td></td>
<td>District level planning should guard against providing detailed local municipal level planning</td>
</tr>
<tr>
<td></td>
<td>Prepared at 1:500 000 to 1:250 000 at A4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub-metropolitan plans (prepared per administrative district)</th>
<th>Local Municipal SDF</th>
</tr>
</thead>
<tbody>
<tr>
<td>An SDF that appropriately addresses the issues of a metropolitan area as whole as a single system cannot also provide sufficient detail for local scale implementation. The metropolitan SDF has to be implemented through sub-area plans guided by the metropolitan SDF and informed by local contextual realities. Sub-metropolitan plans should address the following:</td>
<td>Should address the following:</td>
</tr>
<tr>
<td>Proposals for horizontal and vertical growth</td>
<td>New urban growth areas</td>
</tr>
<tr>
<td>Areas for densification</td>
<td>Areas for densification and restructuring</td>
</tr>
<tr>
<td>Urban conservation areas</td>
<td>Conservation areas &amp; areas to be protected, such as agricultural land and coastal zones</td>
</tr>
<tr>
<td>Open space system</td>
<td>Urban edges around settlements</td>
</tr>
<tr>
<td>Urban edge</td>
<td>Existing and future transport links</td>
</tr>
<tr>
<td>Transportation proposals</td>
<td>Priority areas for investment in community and social facilities</td>
</tr>
<tr>
<td>Investment in community and social facilities</td>
<td>Conceptual guidelines for individual settlement plans that will become the subject of detailed sector plans for each settlement which should show proposals on a cadastral base, see below</td>
</tr>
<tr>
<td>Areas to be protected, such as rural areas outside of the urban edge</td>
<td>Prepared at 1:200 000 to 1:100 000 at A4</td>
</tr>
<tr>
<td>Prepared at 1:200 000 to 1:100 000 at A4</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Sectoral Spatial Development Plans</th>
<th>Sub-area plans or small settlement &amp; SDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared for areas experiencing development pressure or identified as key areas in SDF plan</td>
<td>Prepared for sub-areas, e.g. agricultural / biodiversity land core plan, or small settlement</td>
</tr>
<tr>
<td>May include urban design frameworks and guidelines</td>
<td>1:50 000 to 1:25 000 at A4 cadastral base</td>
</tr>
<tr>
<td>Prepared at 1:50 000 to 1:25 000 at A4 on cadastral base</td>
<td></td>
</tr>
</tbody>
</table>
1.6.2 Defining urban vs. rural areas

Most municipalities, even far flung ones in the rural areas, will have urban components in the form of their larger settlements, even if these are large dispersed villages with concentrations of activity around business centres. Urban planning principles will apply in these settlements to guide their future growth and realise benefits of agglomeration and specialisation.

Similarly, most municipalities, even metropolitan ones, have rural land use components where the predominant activities will be agriculture, nature based tourism, and mining and quarrying. Rural areas also often face significant social and environmental challenges, such as poverty, underdevelopment, over exploitation of the resource base and scarcity of water.

The rural context has been identified as a key national development challenge and special emphasis must be placed in those parts of the SDF covering these areas (refer to table 1.2 for a summary of the CRDP).

There is also the challenge of deciding whether dense sprawling, far flung peri-urban settlements are urban nor rural, see figure 1.3 South African Urbanisation Pattern.

"Many settlements face particularly acute challenges as a result of the apartheid practice of forcibly relocating communities to ‘decentralised points’ in the former homelands. This practice resulted in dense settlements with no sustainable economic base. In many of these settlements the majority of residents commute up to 70 kilometres to work in towns and cities. The distance between home and work not only imposes high transport costs, but also imposes harsh social and personal costs. The creation of sustainable and quality living environments for communities in these settlements requires innovative strategies and programmes" (The White Paper on Local Government)

Although complex and possibly controversial the following guidelines is suggested to assist with defining rural and urban components of a Municipality:
- Local level:
  - area is considered rural if population density <150pp/km²
- Municipal level:
  - predominantly rural – greater than 50% live in rural communities as defined above
  - significantly rural – 15-20% live in rural communities
  - predominantly urban – less than 15% live in rural communities

(source: Kikamore Synergetics, May 2010 Section 2,3,2)
This definition suggests that Bushbuck Ridge, see figure 1.4, with a population of ± 500,000 living in 2589km² i.e. 196ppl/km² is, in fact, predominantly urban, see figure 1.4. This requires a different approach to its SDF than if it were predominantly rural.

1.6.3 Metropolitan municipalities
Metropolitan municipalities are usually characterised by:
A large agglomerated urban settlement system with nodes and corridors (often weakly defined) within an often sprawling urban landscape.
The interstitial fabric between the nodes and corridors tends to be urban rather than rural. However, there could be significant rural areas within the boundaries of the metropolitan Municipality outside of the Urban Edge.
Metropolitan areas are the national economic drivers and as a result the main focus of migration and face the greatest environmental challenges.
The need for efficient urban growth management and resource conservation is the greatest in metropolitan areas.
Metros should be considered as a single multi-nodal system with high density urban growth corridors supporting mass transit public transport systems.
Preservation of metropolitan open space should be a high priority for the various ecological system services it provides.

1.6.4 District municipalities
District municipality, containing a number of local Municipalities, is usually characterised by a settlement structure that comprises separate towns and villages linked by regional transport infrastructure in the form of trunk roads and sometimes rail within a rural landscape.

1.6.5 Local municipalities
The nature of local municipalities varies greatly across the country, as their resource base tenure systems (traditional freehold) and resultant economic drivers vary. Their settlement structures, often a subset of the district municipality, are similar and they comprise of separate towns and villages, or nodes linked by transport infrastructure in a rural, or sometimes peri-urban, landscape, see Section 1.6.2 above.

1.6.6 Urban issues
Typical urban issues to be addressed in an SDF include:
• Urban restructuring and dismantling of apartheid urban patterns
• Reducing the need for vehicle travel and resource demands, especially water and energy
• Strengthening thresholds to support business, community facilities, public transport
• Preserving ecological system services through storm water management, improving water quality, waste water treatment, and solid waste management.
• Promoting multi-functional urban open space systems that support bio-diversity conservation, provide recreation and urban agriculture opportunities, have an amenity value, improve water supply, and protect cultural landscapes.

1.6.7 Rural issues
Typical rural issues to be addressed in an SDF include:
• Sustainable land reform
• Small scale and commercial agriculture
• Rural supply chains and economic linkages with urban, metropolitan and export economies
• Rural based tourism
• Rural carrying capacities in terms of:
  • People
  • Water
  • Arable land (irrigation)
• Biodiversity conservation
• Land tenure – especially in tribal authorities
• Livestock carrying capacities
• Veld management and erosion control
Water conservation and alien vegetation eradication

1.7 Policy context

It is a legal requirement that SDFs should be aligned to national and provincial laws and policy. Tables 1.2 and 1.3 provide synopses of existing laws, policies and programmes that have a bearing on the SDF. A summary of the relevant laws and policies should be undertaken as part of Phase 1 (using Tables 1.2 and 1.3) and presented to stakeholders during the first round of public participation. Note again that the policy context may change over time as policies are amended or new policies are introduced and this should be investigated as part of the start-up phase.

1.8 Provincial Planning Policies and Acts

SDFs must also take into account provincial acts and policies. In some instances provincial legislation provides more detail on the requirements for the process and content of an SDF.

Provinces with their own legislation guiding land use planning include:
- Gauteng (Gauteng Planning and Development Act, Act 3 of 2003);
- Northern Cape (Northern Cape Planning and Development Act, Act 7 of 1998);
- KwaZulu-Natal (KwaZulu-Natal Planning and Development Act, Act 6 of 2008);
- Western Cape (Land Use Planning Ordinance, Ordinance 15 of 1985).

Provincial policies and planning reflect provincial circumstances, and thus provide more guidance on the application of planning concepts and principles at the local level. Provincial SDFs and Growth and Development Strategies (PGDS), and Provincial Human Settlement Policies (PHSPs) will be particularly important informants to local SDFs.

Other important planning instruments include the Medium Term Expenditure Framework (for both national and provincial government) and provincial infrastructure planning such as the Western Cape’s Strategic Infrastructure Plan.
### Table 1.2 SUMMARY OF CURRENT RELEVANT LEGISLATION

<table>
<thead>
<tr>
<th>Act/Policy</th>
<th>Relevant sections</th>
</tr>
</thead>
</table>
| Municipal Systems Act (Act 32 of 2000)                                    | Chapter 5 provides for the preparation of IDPs:  
  1. S26(e) lists an SDF as a core component of an IDP and requires that the SDF provides basic guidelines for a municipal land use management system  
  2. S24(1) requires that municipalities should align their planning with national and provincial planning, as well as those of affected municipalities  
  3. S27 requires a district municipality to adopt a framework for integrated development planning that is binding to the local and district municipality.  
    - This framework should:  
      1. identify relevant national and provincial legislation,  
      2. identify matters that require alignment between local and district planning  
      3. specify principles to be applied  
      4. determine procedures for coordination and amendment of the framework |
| Local Government: Municipal Planning and Performance Management Regulations (GN R796 of 2001) | S2(4) requires that an SDF should:  
  - give effect to the DFA principles;  
  - set out objectives that reflect the desired spatial form of the municipality;  
  - contain strategies and policies to achieve the objectives and which should indicate desired patterns of land use;  
  - address the spatial reconstruction;  
  - provide strategic guidance regarding the location and nature of development;  
  - set out basic guidelines for a land use management system in the municipality;  
  - set out a capital investment framework for the municipality’s development programs;  
  - contain a strategic assessment of the environmental impact of the SDF;  
  - identify programs and projects for the development of land within the municipality;  
  - be aligned with the spatial development frameworks reflected in the integrated development plans of neighbouring municipalities; and  
  - provide a plan of the desired spatial form of the municipality, which should:  
    1. indicate where public and private land development and infrastructure investment should take place;  
    2. indicate desired or undesired utilisation of space in a particular area;  
    3. delineate an urban edge;  
    4. identify areas for strategic intervention; and  
    5. indicate priority spending areas. |
| White Paper on Spatial Planning and Land Use Management (2001)             | Requires municipalities to prepare SDFs with the following components:  
  - policy for land use and development;  
  - guidelines for land use management;  
  - a capital expenditure framework showing where the municipality intends spending its capital budget; and  
  - a strategic environmental assessment  

The SDF should indicate:  
  - directions of growth;  
  - major movement routes;  
  - special development areas for targeted management to redress past
<table>
<thead>
<tr>
<th>Act/Policy</th>
<th>Relevant sections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>imbalances;</td>
</tr>
<tr>
<td></td>
<td>conservation of both the built and natural environment;</td>
</tr>
<tr>
<td></td>
<td>areas in which particular types of land use should be encouraged and others discouraged; and</td>
</tr>
<tr>
<td></td>
<td>areas in which the intensity of land development could be either increased or reduced.</td>
</tr>
</tbody>
</table>

The SDF should:
- be a strategic, indicative and flexible forward planning tool to guide planning and decisions on land development.
- develop an argument or approach to the development of the area of jurisdiction which is clear enough to allow decision-makers to deal with the unexpected (for example, applications from the private sector);
- develop a spatial logic which guides private sector investment. This logic primarily relates to establishing a clear hierarchy of accessibility;
- ensure the social, economic and environmental sustainability of the area;
- establish priorities in terms of public sector development and investment; and
- identify spatial priorities and places where public-private partnerships are a possibility.

(Paragraph 3.2.1)

**Table 1.3 SUMMARY OF KEY NATIONAL POLICIES AND PROGRAMMES OF RELEVANCE TO THE SDF**

<table>
<thead>
<tr>
<th>Policy</th>
<th>Summary of key points</th>
<th>Implications for the SDF</th>
</tr>
</thead>
</table>
| The National Spatial Development Perspective (NSDP) (2006) | Government policy that recognises the importance of the space economy in addressing the legacy of Apartheid and poverty and provides principles for guiding the space economy as follows:  
  - All people have a right to basic services (wherever they reside)  
  - Fixed investment should be direct to areas with economic and employment growth potential  
  - Social inequalities should be addressed through investment in people rather than places  
  Future settlement and development opportunities should be channeled to nodes and corridors related to major growth centres | The SDF should explicitly address spatial restructuring  
The SDF should reflect on service backlogs and present a position on the provision of services, especially in rural areas.  
The SDF should identify growth nodes and corridors, where investment will be made in infrastructure and include strategies to encourage development in these areas  
The SDF should reflect on and make proposals for the spatial implications of social investment, e.g. how to promote access to ABET facilities. |
| Breaking New Ground (BNG) (2004)               | The focus of this policy is to change the delivery of housing at scale, to ensuring that housing delivery results in the creation of sustainable human settlements. The objectives of this policy are:  
  - Accelerating the delivery of housing as a key strategy for poverty alleviation  
  - Utilising provision of housing as a major job | The SDF should indicate where future subsidised housing project should be located, which will contribute to the creation of sustainable, efficient and equitable settlements.  
Provision should be made for a variety of housing typologies, aimed at the full |
<table>
<thead>
<tr>
<th>Policy</th>
<th>Summary of key points</th>
<th>Implications for the SDF</th>
</tr>
</thead>
</table>
|        | creation strategy     | spectrum of the housing market.  
The SDF should reflect on the need for supporting infrastructure (such as social facilities) related to subsidised housing projects. 
Note that housing investment can help with urban restructuring if it is appropriately guided and located. |
|        | • Ensuring property can be accessed by all as an asset for wealth creation and empowerment  
• Leveraging growth in the economy  
• Combating crime, promoting social cohesion and improving quality of life for the poor  
• Supporting the functioning of the entire single residential property market to reduce duality within the sector by breaking the barriers between the first economy residential property boom and the second economy slump.  
• Utilizing housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring |    |
| Neighbourhood Partnership Development Grant (NPDG) (2007) | The NDPG is aimed at stimulating and accelerating investment in poor, underserved residential neighbourhoods by providing technical assistance and capital grant financing for municipal projects. These projects should have a distinct private sector element or an intention to achieve this. Funding from this programme takes the form of a conditional grant to municipalities through the Division of Revenue Act (DoRA), 2007 and is administered by the Neighbourhood Development Programme (NDP) Unit of the National Treasury. (National Treasury, 2007) | The SDF should indicate priority areas for investment and renewal, and identify potential projects that could be funded by the NPDG. |
| Comprehensive Rural Development Programme (CRDP) (2009) | The CRDP forms part of government’s Medium Term Strategic Framework. It has a vision to create vibrant, equitable and sustainable rural communities, through:  
• Coordinated and integrated broad-based agrarian transformation (with a focus on the establishment of rural business initiatives, local markets, co-operatives, etc.)  
• Strategically increasing rural development (with a focus on empowering rural people)  
• An improved land reform programme | The SDF should identify suitable rural development initiatives and indicate accessible locations for these  
The SDF should identify opportunities for the empowerment of rural people, such as food gardens, and suitable locations for such opportunities  
The SDF should reflect on land reform programmes and make suggestions for the improvement of these programmes |
| Land reform | • In order to align land reform initiatives the former Department of Land Affairs embarked on a series of District Area Based Plans to align land reform efforts with other initiatives including SDFs. | SDFs should identify opportunities for land reform especially in the agricultural and eco-tourism fields where possible. |
1.9 Critical Assessment Framework: Spatial Principles

The Critical Framework, comprising spatial principles, is introduced in Phase 1 because principles on good spatial practice should inform all deliberations on spatial planning as a golden thread from the start. This will help to clarify the issues and vision in Phase 2 as well as provide a yardstick for identifying gaps and issues in the Spatial Analysis in Phase 3. These principles interpret the key policy requirements described in sections 1.7 and 1.8 to guide analysis and proposals.

Section 2(4)(a) of the Local Government Regulations No 796 of 2000 requires that an SDF should reflect the DFA principles. Section 3 (1) of the DFA presents an extensive list of principles for land development, some of which are aimed at influencing the spatial pattern of development, with others focused on administrative procedures and the facilitation of development.

Table 1.4 provides notes on the implementation of the DFA principles. The Critical Assessment Framework provides a set of suggested spatial principles for adoption in the SDF that interprets the DFA principles and explains the practical implications of those principles. The proposed principles should be included as part of the background information presented as part of the first round of public participation in Phase 2.

Note: more principles specific to the vision and issues facing a particular municipality may emerge as it completes Phase 2, Issues and Vision, and Phase 3, Spatial Analysis and Synthesis.

1.9.1 Measuring Accessibility

The need to ensure that people have access to a variety of opportunities is implied in a number of the DFA principles, see Table 1.4, (S3(c)(i), (iii)). This requires an understanding of the relationships between different activities in terms of spatial proximity (close and far), access and time. In the past accessibility has mostly been considered in terms of travel time in private vehicles. However, this measurement is not only environmentally unsustainable, as it is mostly dependent on access to private motor vehicles but also reflects a denial of the reality that the majority of our citizens do not have private vehicles, may not always be able to afford public transport and thus have to spend significant time and energy walking to fulfil their needs. Thus appropriate walking distance should always be used as the measure for accessibility. 20 minutes or 1km is regarded as an acceptable distance to walk and should be used as a basis of settlement design, see figure 1.5.

1.9.2 Functional Integration

The implementation of the walking distance principle to promote greater access to opportunities for all people, will require the functional integration, (DFA principles, see Table 1.4, S3 (c)(i),(iii),(v)) of urban activities. At least 50% of urban activities should be within walking distance of where people live, see figure 1.6.

1.9.3 Socio-economic Integration

The principle of access and integration, also requires socio-economic integration, see Table 1.4, (DFA principle S3(c)(i),(vii)). Little progress has been made in this regard since the advent of democracy. In reality there is often community resistance to integration of poor, middle and high income communities, and bank valuers often downgrade property values where informal settlements or low income housing is provided in close proximity to middle and high income housing. The use of a socio-economic gradient with relatively small differences in income and property value between adjacent communities can help mediate this problem.

Figure 1.7 illustrates how a high level of socio-economic integration can be achieved in a 1km radius by applying this principle.

In particular efforts should be made to locate low income neighbourhoods nearer to the core or nodes of settlements and away from the periphery.
Figure 1.7 Socio-economic gradient (shows how different socio-economic groups can be planned within walking distance of each other)

Map 21
Mowbray before Removals, circa 1960

Example of convenient and integrated environment before the Group Areas Act.

Recent example of large, well located socially and economically integrated mixed use project embracing these principles.
<table>
<thead>
<tr>
<th>Summary of DFA principle</th>
<th>Notes for implementation</th>
</tr>
</thead>
</table>
| 3(c)(i) Integration of social, economic, institutional, and physical aspects of land development | • Understand and map the social, economic and physical aspects of the municipal area  
• Ensure that proposals are realistic in terms of the institutional capacity and available funding of the municipality |
| 3(c)(ii) Integration of rural and urban areas in support of each other | • Understand the nature of the space economy and how urban and rural activities support each other (e.g. agriculture and processing) and adopt policies that could strengthen this relationship (e.g. protect agricultural land from development)  
• Understand the roles of settlements in the space economy and promote future development that is supportive of the role. |
| 3(c)(iii) Promotion of the proximity or integration of residential and employment opportunities | • Use walking distance as a basis for settlement planning  
• Ensure that all new development allows easy access for all people  
• Make provision for mixed use development along development corridors |
| 3(c)(iv) Optimise the use of existing resources | • Understand and map the resource base of the municipality, particularly infrastructure networks  
• Use the walking distance measurement to assess the accessibility of the resources to residents, when considering proposals |
| 3(c)(v) Promote mixed use development | • Provide guidance on land use management guidelines for mixed use development  
• Provide for a mix of uses in corridors and nodes |
| 3(c)(vi) Discourage urban sprawl and promote densification | • Delineate an urban edge  
• Provide clear and practical policies and strategies to promote appropriate densification |
| 3(c)(vii) Address the spatial legacy of apartheid | • Understand and map the spatial patterns and obstacles to physical integration between previously segregated areas  
• Introduce clear proposals and strategies to promote integration, particularly in relation to new housing development, such as a requirement to include gap housing in middle income developments  
• Promote sustainable access to rural land opportunities for HDIs in the fields of agriculture, mining and tourism |
| 3(c)(viii) Encourage environmentally sustainable development | • Map and understand the role of the biophysical resource base in the municipality  
• Include clear strategies that will protect and/or minimise the impact of development and human activities on this resource base (such as a set back for development from river corridors)  
• Promote farming methods that do not erode or breakdown the structure of the soil, remove nutrients beyond sustainable nor pollute resources  
• Minimise visual impact of agricultural and mining buildings, open cast mining and infrastructure, especially electrical powerlines, particularly on rural areas. |
1.9.4 Efficient urban structure
Applying the principles of walking distance access and functional integration, will contribute to creating more efficient (i.e. where urban infrastructure is used optimally) settlements, see Table 1.4 (DFA principle S3(iv), (vi)(vii)). Currently settlements are characterized by segregation of land uses and low density development that cannot support public transport, or small businesses. To address these issues and achieve better access and integration, appropriate densification will have to be promoted in settlements, see figure 1.8.

Density targets should be as follows: 25 dwelling units per hectare should be the target average density for settlements that require internal public transport services (for use by all). In small rural settlements an average gross density of 12-15 dwelling units per hectare should be targeted so that they function within walking distance and reduce the impact on agricultural land and scenic landscapes. Within these average target ranges densities can increase towards the core and decrease to as low as 4 – 8 du/ha to the periphery. In larger, more complex settlements a multi-nodal pattern following the same principles may be appropriate.

A further mechanism to achieve densification and integration is to limit lateral growth of settlements through the use of an urban edge (DFA principle S3(c)(vi)). An urban edge will promote densification and integration and protecting valuable natural, agricultural and scenic resources, see figure 1.9.

1.9.5 A logical nodal and settlement and nodal hierarchy
The concept of nodal development allows for the efficient accommodation of a large population. In large urban areas decentralised nodes are connected by high speed arterials or railway lines. This concept is applicable to metropolitan municipalities and as well as local and district municipalities, where the various settlements should be allowed to grow optimally according to their character and function, whilst protecting agricultural, natural and scenic resources between settlements (DFA principles3(c)(ii), (iv)), see figure 1.10.

In order to increase economic activity, social facilities and employment opportunities should be grouped or clustered according to a spatial hierarchy logic, i.e. higher order facilities in the most accessible locations and vice versa, rather than randomly scattered depending on where sector department’s individual landholdings happen to be, see figure 1.10.

- Use land for its best use whether it is publicly or privately owned
Unless there are absolutely no other options land should be used for its highest and best use where practicable. For example, well located arable commonage land close to urban settlements should be used for intensive agriculture such as crop farming or market gardening rather than extensive agriculture such as livestock farming or peripheral RDP housing schemes.

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Figure 1.8 Appropriate densification for a single node settlement requiring internal public transport

Figure 1.9 Hierarchy of Settlements (source: MCA, 2002)
1.9.6 A minimum viable settlement

The minimum size for a viable settlement depends on a number of factors including the technology to be used to service it and the minimum threshold to support key community facilities such as a primary school or clinic. If conventional urban services are to be delivered then the minimum number of households to support a primary school, i.e. 500 households or 1500 to 2000 people within walking distance can be used. Such a settlement should also be located on a main route where it can access passing trade and so receive support for business and employment creation.

1.9.7 Principles for compaction and densification

Understanding densities and how they may be altered depend on the kind of urban growth outcomes that are desirable and has given rise to a debate between the desirability of urban sprawl, generally associated with uncontrolled low density growth, versus compact growth. Compact growth is seen as being clearly focused and structured with a view to efficiently providing transport and services, creating viable business thresholds and attractive public places, and reducing the impact of urban growth on scarce resources such as arable, scenic and high biodiversity potential land.

Figure 1.11 illustrates two contrasting patterns, that of uncontrolled urban sprawl, and compact and focused growth.

This is in stark contrast to the current spatial layout of the town where some people have to travel...
up to four kilometers to attend to their daily requirements.

Figure 1.12 indicates the outcome of research on what benchmark density starts to create successful and sustainable settlements. It has been found that an average city or town density of 100 people per hectare or 25d/h, assuming a household size of four, is the minimum threshold at which urban settlement begin to perform successfully.

In turn economic efficiency and social development is wholly dependent on the availability of eco-system services such as water, land, building materials and mineral resources. Because our planet is essentially a closed system (with solar energy as our only external input), it is not possible to exceed the capacity of the system in the long term, thus excessive demand in the short term has long term negative consequences. Figure 1.13 graphically illustrates the dependence of economic development and human well-being and reproduction on eco-system services. This closed cycle implies that production is dependent on human resources (i.e. human reproduction) and what can be extracted from the natural environment. In turn, waste from economic production and human reproduction cannot exceed the capacity of the environment to decompose waste.

The implementation of this framework in the planning process is unpacked in more detail in section 3.3.

1.10 Existing Spatial Plans
As part of the Phase 1 background, research existing spatial plans for the municipality, e.g. previous SDFs. Review these SDFs for relevant background information and policies that may still be valid. Information gleaned from this exercise should be summarized and form part of the background information presented during the Phase 2 public participation process.
The approval status of plans of existing spatial plans will also have to be checked. If they have formal status and it is intended that they will be replaced by the SDF they may have to be formally withdrawn in terms of the relevant legislation. The process will have to be coordinated with the preparation and eventual approval of the SDF.

### 1.11 Relationship with Sector Plans

Sector plans refer to plans that address specific aspects of the municipal development strategies, such as the Human Settlement Plan or Disaster Management Plan.

Ideally the timing of the preparation of sector plans will be coordinated so that they follow on the preparation of the SDF that will provide the spatial context for sector. In this way base information can be shared and policies and strategies coordinated. However in reality this coordination is seldom ideally timed, and a number of sector plans will probably exist already. These plans should be analysed as part of Phase 3 of the preparation of the SDF (refer to section 3.1.3). Be aware that the formulation of a credible SDF may result in the need to revise some of the sector plans. This issue should be addressed at the joint technical committee meetings, see section 1.3.

The relationship between the SDF and an EMF for the municipality requires consideration. An EMF overlaps to some extent with an SDF as it determines spatial planning categories for an area and provides land use management guidelines for those areas, see table 3.3) An approved EMF will have legal status in terms of NEMA, and will guide decisions regarding environmental authorisation for development applications (administered by provincial departments or sometimes DEA). It is thus critical that EMFs and SDF are aligned and should preferably be prepared in parallel.

### 1.12 Alignment with surrounding SDFs

Aligning the SDF with the SDFs of surrounding municipalities is a legal requirement².

Alignment is crucial to ensure that the spatial vision for the long term development of the municipality will not be contradicted by conflicting planning in neighbouring areas, but rather enhanced through a common vision of the future of the district space economy. In this regard the district SDF plays a particularly important role in defining the future spatial structure of the region and indicating development corridors and a desired settlement pattern. Local municipalities have to align their spatial vision to that of the district SDF. In this way competition between local municipalities to attract investment and growth (mostly with negative results for both) can be mediated, and duplication of development projects can be avoided.

As part of the start-up phase of the SDF, the SDFs of the surrounding municipalities (including the relevant district SDF(s)) should be obtained and studied. The district SDF should always provide clarity in this regard.

Consultation with neighbouring municipalities is undertaken in Phase 2 (refer to section 2.5).

### 1.13 Summary

Summarise existing available information identifying any major gaps, e.g. population information.

---

<table>
<thead>
<tr>
<th>OUTCOMES OF START-UP PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political support for the process of formulating the SDF</td>
</tr>
<tr>
<td>An understanding of the role of the SDF</td>
</tr>
<tr>
<td>the scope of work of the SDF</td>
</tr>
<tr>
<td>national legislation and policies that must inform the formulation of the SDF</td>
</tr>
<tr>
<td>provincial legislation and policies that inform the formulation of the SDF</td>
</tr>
<tr>
<td>the relevance of sector plans to the SDF</td>
</tr>
<tr>
<td>the relevant aspects of neighbouring SDFs</td>
</tr>
<tr>
<td>A set of normative principles on which to base the SDF</td>
</tr>
<tr>
<td>A project plan for the formulation of the SDF</td>
</tr>
<tr>
<td>A constituted steering committee to guide the process of formulating the SDF</td>
</tr>
<tr>
<td>Joint planning committee</td>
</tr>
<tr>
<td>All necessary abutting municipal SDFs and sector plans</td>
</tr>
<tr>
<td>Gap analysis of unavailable information which must be addressed in the public participation phase on an 80/20 principle basis</td>
</tr>
<tr>
<td>All of the above should be recorded in an inception report that provides the basis for the Phase 2, Issues and Vision phase.</td>
</tr>
</tbody>
</table>
**TECHNICAL NOTE 1: GENERAL TIPS FOR PRODUCING AN SDF**

- Illustrate all aspects of the SDF with maps and diagrams. It is particularly important to spatially illustrate (i.e. map):
  - status quo information;
  - spatial vision;
  - problems and issues; and,
  - opportunities and constraints to demonstrate the link between proposals and their informants (basis).
- Where informants such as national policy, socio-economic trends or characteristics of the built environment are listed and described, the implications of this information for the SDF should be indicated immediately afterwards.
- All graphics and tables should be directly referred to in their accompanying text.
- All graphics and tables should be numbered and named with a caption.
- Sections, pages and graphics should be numbered according to a clear system (e.g. tables in section 1 are numbered Table 1.1, 1.2 etc.).
- Refer to technical note 7 for map symbols, fills and colours to be used.

**TECHNICAL NOTE 2: FORMAT OF THE SDF DOCUMENT**

During Phase 1 the compilation of the SDF documentation should be initiated. As each phase of work of the SDF is completed it should be written up as a chapter of the final report. Therefore, format and layout should be agreed at the start. Consider the following when starting this process:

- A4 documents are easy to distribute, print and copy (as opposed to A3).
- Make an effort to present the document in black and white only. If colour graphics are unavoidable, keep them to the minimum, i.e. the opportunity and constraints plans and the final SDF.
- Whether the document is presented in portrait or landscape format will depend on the general orientation of the physical shape of the municipality. Decide whether a map of the municipality is best presented in portrait or landscape format when the map is oriented with north pointing to the top of the page (note that north should ALWAYS be directed to the top of the page).

**TECHNICAL NOTE 3: LANGUAGE & PITCH**

The SDF should be accessible to the widest possible audience.

- Avoid the use of planning jargon.
- Include a glossary of planning terms and a list of acronyms used.
- Keep the language simple and avoid long sections of text without illustrations.
- Include a clear summary/explanation of the structure of the SDF document(s) at the beginning of the report.
- Enlist a lay person/non-planner to proof read the document before publishing to ensure that it is understandable to every one.
2. PHASE 2: ISSUES AND VISION

It will be important to find a balance between sufficient public participation and a long drawn out engagement that unnecessarily delays the SDF. A two stage engagement has been found to provide a satisfactory balance.

Phase 2 focuses on the first of two rounds of intensive public participation (the second round being the focus of Phase 5).

These rounds of public participation can be linked with the IDP process.

In addition to this process there may be a need for bilateral meetings with individual stakeholders during the course of formulating the SDF, as specific issues come up.

The success and effectiveness of the SDF will, to a large degree, depend on the level of buy-in from achieved all stakeholders. This buy-in is crucial to bridging the gap between the SDF as a policy document and its implementation.

The purpose of consultation in Phase 2 is to invite all stakeholders to participate in the formulation of the SDF, to identify issues to be addressed in the status quo analysis and SDF, and to agree to a spatial vision that will underpin the SDF.

2.1 Legal requirements for public participation

The right to participate in governance is entrenched in South African law and policy and place an obligation on local government to afford its constituents this opportunity. Table 2.1 lists the relevant legislation and its implications for the SDF process.

2.2 Incorporation into IDP cycle

Ideally public participation for the SDF should be incorporated into IDP consultation processes. This will help avoid public participation fatigue and reduce the demands on the time of the public and officials.

The IDP’s ward committees and representative forums should be suitable for this purpose. SDF consultation could be combined with other items on the agendas of these bodies’ meetings.

However, it is essential that the SDF gets adequate “air-time” in this process. If this cannot be achieved in the IDP committees and forums’ participation in the SDF formulation can also be run in parallel with the IDP consultation process, but there is a danger of public participation fatigue. Many of those stakeholders interested enough to participate in the SDF formulation may also be involved with the IDP and find the demands on their voluntary time too great.

Integrating the SDF public participation with the IDP cycle of public participation could have timing implications for the SDF. This may require additional meetings.

2.3 Stakeholder Engagement

This section deals with the process of involving community stakeholders in the formulation of the SDF.

Different terms are commonly used for members of the public who should be consulted when formulating public policy, such as stakeholders, interested and affected parties and interest groups. The term stakeholder is used in this document.

Note that the public/community includes the following types of stakeholders:

- Individual residents in the municipality (aka an ordinary member of the public);
- Community organizations such as civics, ratepayers associations, and informal traders associations who participate through the organization’s structures;
- NGOs active in the municipality; and,
• Property owners and business people.

The IDP database can be useful as a resource to identify and contact stakeholders. Depending on the Council policy and the administrative capacity of the municipality, stakeholders could be contacted directly though bulk emails or postage (in addition to media releases). Refer to technical note 4 for a list of stakeholders.

2.3.1 Minimum requirements
There are no specific legal requirements regarding how to engage with stakeholders. The following is regarded as the minimum effort required:
• Place a notice in the local press and at municipal offices and libraries, informing people of the process and inviting inputs; and,
• Hold a round of public meetings that are accessible to all communities to inform them of the process and discuss the issues and spatial vision.

In predominantly rural municipalities, where the population is dispersed and travel costs are high, consider holding public meetings on the same day as other events that oblige people to travel to centres, such as the payment of government grants.

2.3.2 Notification and advertising
Press notices, notices in offices and libraries, and those sent with rates accounts must include:
• Notification of the initiation of the SDF process; 
• An invitation to register as a stakeholder; 
• Details of public meetings; and,
• Details of how to submit inputs and make oral representation.

This notice should also be placed on the municipal website.

Press notices should allow for adequate advance warning (at least 2 weeks before the public meeting). Allow at least 30 days for the submission of written inputs.

2.3.3 Public meetings
Ideally this round of public participation should take the form of workshops, where there is adequate opportunity for discussion in a forum, and where stakeholders can interact and hear other comments/inputs.

At a minimum workshops should be held in all the major centres, with due regard as to how stakeholders from poor communities will be able to get to the workshop.

It is important that the local Councillor or relevant portfolio councillor attend (e.g. councillor responsible for LED, to attend meeting with business sector) workshop. The Councillor will traditionally open the workshop, but ideally the workshop should be chaired/facilitated by an independent person, such as a professional facilitator, or a suitable attendee at the meeting.

A likely challenge that may present itself at workshops is the accommodation of stakeholders with differing levels of literacy and understanding of spatial planning. It is thus important that an opportunity for capacity building is offered to stakeholders. This may take the form of a training session before the specific municipal SDF is discussed where key planning concepts are explained in the home language of stakeholders. Annexure A includes a glossary of planning terms translated into the main provincial languages.

The workshops dealing with the SDF should at a minimum include the following:
• A display of existing information, based on the information gathered in Phase 1, particularly maps.
• A short presentation of the findings of Phase 1 and the envisaged planning process.
• An opportunity for people to raise issues to be addressed. It is important that the facilitator keep the focus to issues with spatial implications.
• A discussion on the principles and spatial vision. Participants should be invited to name characteristics of their ideal municipality based on issues raised (e.g. ask them to imagine what their municipality will ideally be like in 20 years time). This will then be consolidated into a
<table>
<thead>
<tr>
<th>Act</th>
<th>Relevant sections</th>
<th>Implications for SDF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constitution of the Republic of South Africa (Act 108 of 1996)</td>
<td>S 151(1 (e), 152 and 195(e) obliges municipalities to encourage the involvement of the public and communities in local government matters including policy-making.</td>
<td>Local communities, community organisations and the public in general should be actively encouraged through a formal process to participate in the formulation of the SDF.</td>
</tr>
</tbody>
</table>
| Municipal Structures Act (Act 117 of 1998)                | Allows for a sub-council or ward system for metros (part 3) and, a ward system for local municipalities (part 4). S 45(3)(g) and 56(3)(g) requires Executive Committees or Executive Mayors to:  
- annually report on the involvement of communities and community organisations in the affairs of the municipality;  
- ensure that regard is given to public views; and,  
- report on the effect of consultation on council decisions. | The ward system or sub-council system presents an opportunity for engaging with communities during the formulation of the SDF.  
The public participation process should be meticulously recorded, as well as amendments made to draft proposals as a result of the public input. |
| Municipal Systems Act (Act 32 of 2000)                    | S16(1) and 4(c) requires the municipality to encourage and create conditions for the community to participate in the IDP; to build the capacity of the community to participate in the affairs of the municipality, and to assist councillors and officials to foster such participation  
S (5) describes the public’s right to contribute to decision-making, make representation to Council and notification of Council decisions | A formal participation process is required to afford sufficient opportunity for public input into the formulation of the SDF.  
Participation in the SDF process may also require capacity building processes for communities, councillors and officials  
This process should allow for various forms of submissions, such as written submissions (e.g. in response to advertisements) and oral submissions at public meetings and workshops.  
The public should be informed of Council decisions regarding the SDF. |

(DPLG, 2005)
preliminary spatial vision that will eventually be agreed with the Council.

Technical notes 5 and 6 provide details on how to run a workshop, as well as general guidelines for hosting workshops.

2.3.4 Sector specific engagement
In addition meetings with sector stakeholders may be necessary. Sector stakeholder groups include:
- Business community (including informal traders) & organized labour.
- Social and community service providers & NGOs (including education sector).
- Environmental and heritage groups, including ratepayers’ organizations.
- Agriculture (could be included in business sector or may warrant a separate meeting).

Representatives of the relevant municipal departments and other government agencies that service the respective sectors should be invited to these meetings.

2.3.5 Record of inputs
Once first round of public workshops is completed, a complete report of the issues raised and a vision statement based on outcomes of the workshops and circulate this to the participants, should be prepared.

2.4 How to prepare a spatial vision statement

The statement should be succinct – in one sentence or a number of statements (not more than three or four) that addresses the major concerns and opportunities in the municipality.

This statement will form the basis of a set of goals related to the main areas of intervention such as socio-economic development, environmental sustainability or smart growth that are identified in the vision, see figure 2.1. Participants should also be encouraged to set out their spatial vision for the area on a map, see Technical Note 7. This will help to clarify the vision statement.

These objectives will be formulated at the onset of Phase 4 of the project and unpacked in measurable objectives or key performance indicators as part of the monitoring and evaluation plan, see figure 2.4.

Figure 2.4 Hierarchy of vision, goals, objectives

2.5 Identifying a unique sense of place

Effort should be taken as part of the visioning exercise to define each Municipality’s and each settlement’s unique sense of place. This should be more than just a particular economic activity but should encapsulate the aspect of scenery, memorable places, events, urban morphology and heritage, see figure 2.5.

Ideally this engagement should take the form of a workshop with planners or officials responsible for spatial planning from the relevant municipalities, where cross-boundary issues can be discussed. It is important to engage officials at municipalities who are unable to attend the workshop.

Provincial planners should also attend this workshop, to ensure
alignment with provincial planning and to assist with the resolution of conflicts.

2.6.1 Local municipalities
Local municipalities must engage with the district municipality in which they are located as well as neighbouring municipalities, including where necessary neighbouring district municipalities. Note that intergovernmental structures may exist to facilitate this engagement such as a planning forum convened by the district municipality.

2.6.2 District municipalities
District municipalities preparing an SDF have to invite all the relevant officials from the local municipalities in their jurisdiction, as well as surrounding districts and immediately adjoining municipalities.

2.6.3 Metropolitan municipalities
Metros similarly must invite adjoining district and local municipalities to discuss cross-boundary issues.

2.7 Input from government agencies

It is critical to get input from other government agencies at this stage, in order to:
- understand planning initiatives that will impact on the SDF; and
- get access to latest base information that will be used in the status quo analysis.

2.7.1 Important agencies required to participate in process
a) Provincial Housing
b) Provincial Planning & Environment
c) Provincial office where PGDS is generated
d) DMR (if applicable)
e) Agriculture
f) DRDLR
g) COGTA
h) Conservation agencies such as SANParks, or provincial agencies
i) SAHRA or provincial heritage agencies
j) DWA
k) DoT

2.7.2 Participation process
The participation should also take the form of a short workshop. At this workshop the issues raised to date should be presented and representatives should be asked to verify that the compilers of the SDF have the latest relevant policy documents;
- direct planners to base information; and,
- agree on how to best undertake further engagement with the government agencies.

2.8 Political support for issues, vision and principles

As a last step in this phase the issues, vision and goals should be presented to Council, with the view to getting consensus on the issues to be addressed and a Council resolution to support the vision and principles.

Whether the presentation is to the full Council or the relevant portfolio Committee should be agreed as part of Phase 1.

2.9 Summary of outcomes of participation process

Table 2.2 below provides a summary of the various engagements required during Phase 2.

The outcomes should be written up in a summary suitable for inclusion in the SDF report describing the spatial vision, goals, objectives and issues as reported back from the public participation engagements.
<table>
<thead>
<tr>
<th>Type of engagement</th>
<th>Participants</th>
<th>Outcomes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting</td>
<td>Council</td>
<td>Agreement on public participation process for SDF and commitment to participate</td>
<td></td>
</tr>
<tr>
<td>Public meetings/</td>
<td>Members of the public, stakeholders groups</td>
<td>Issues to be addressed in SDF Preliminary vision</td>
<td></td>
</tr>
<tr>
<td>workshops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops</td>
<td>Sector stakeholders Representatives from relevant government agencies</td>
<td>Issues to be addressed in SDF Preliminary vision</td>
<td>Optional depending on demand</td>
</tr>
<tr>
<td></td>
<td>Relevant municipal officials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops</td>
<td>Neighbouring municipal officials Provincial planning official(s)</td>
<td>Issues &amp; information regarding cross border planning Agreement re future engagement</td>
<td>Suitable IGR forums may already exist Follow up with municipalities not able to attend</td>
</tr>
<tr>
<td>Workshop</td>
<td>Government agencies, such as provincial departments who deals with matters that have spatial implications (such as Dept. of Health)</td>
<td>Issues to be addressed in SDF Latest policies and base information to inform SDF</td>
<td></td>
</tr>
<tr>
<td>In-house workshop</td>
<td>Joint technical committee (i.e. Officials from relevant municipal departments)</td>
<td>Confirmation of issues, vision Access to base information</td>
<td>This workshop should form part of the regular meetings of the joint technical committee</td>
</tr>
<tr>
<td>Meeting</td>
<td>Council</td>
<td>Confirmation of proposed vision, principles and issues to be addressed in SDF</td>
<td></td>
</tr>
</tbody>
</table>
OUTCOMES OF PHASE 2

a) A database of community stakeholders who wish to participate in the SDF process.
b) Commitment from all the relevant municipal departments to engage in the formulation of the SDF and an agreed process for engagement
c) An agreed process for participation from government agencies
d) An understanding of the spatial issues to be addressed in the SDF
e) An agreed spatial vision for the SDF
f) Goals based on the spatial vision
g) Political support for the SDF vision and goals
TECHNICAL NOTE 4: STAKEHOLDER IDENTIFICATION

Stakeholders in the preparation of the SDF include the following:

- Residents and property owners of the municipality;
- Civil society organizations such as civics, ratepayers’ associations, heritage organizations, business chambers, informal traders’ organizations, farmers’ unions;
- Property developers active in the municipal area;
- Political structures and representatives at the municipal level such as ward committees, Councilors and Council Committees;
- Officials from other departments within the municipality whose work will either influence or be influenced by the SDF;
- Adjoining municipalities including district municipalities – their Councils and officials;
- Other spheres of government such as provincial and national departments.

TECHNICAL NOTE 5: GUIDELINES FOR ADVERTISING

Should be a multi-pronged strategy including:

- insertions in Municipal accounts;
- local newspapers;
- posters in prominent civic meeting points, public transport vehicles;
- notice in agendas if civic bodies – IDP representative forums

TECHNICAL NOTE 6: POSSIBLE PROGRAMME FOR THE ISSUES AND VISION WORKSHOP

1. Introduction
   To be presented by an appropriate person, such as a dedicated facilitator or Councillor that will chair the meeting.
   To include the ground rules for behaviour at the meeting (e.g. respondents to state their name, before making comments).
   To set out the purpose of the workshop.
   To explain the agenda and procedures

2. Background information presentation
   Project plan
   Study area
   Brief overview of existing spatial information (if available)
   Role and requirements for SDF

3. Unpacking of issues
   Can be undertaken with all participants or in small groups according to themes, depending on the number of attendants. (Ideally need at least 4 groups of 10 participants)
   Each group to choose a chair to guide and write-up the discussion and a rapporteur
   Discussion for an agreed period of time (20-30 minutes)
   Regroup in plenary session, rapporteurs to report on group discussion

4. Vision session
   Introduction about the nature of the vision statement
   Small group discussion and report back to plenary as per issues discussion

Chair/facilitator then to facilitate this into a spatial vision statement, for consensus in the plenary session, subject to future ratification by council

5. Conclusion
   Note: participants may struggle to formulate a unique vision for the Municipality and settlements, and even more so, to articulate it spatially.

Facilitators will need to be well prepared to assist with achieving a satisfactory outcome to this step.

Outline next steps in SDF
   Recap project programme and next steps in formulation programme
   Explain opportunities for further input & submission
   Provide an idea of when the final workshop on proposals might happen (note: if a scenario approach is taken there may be need for interim workshop prior to final workshop)

TECHNICAL NOTE 7: GENERAL GUIDELINES FOR WORKSHOPS/ PUBLIC MEETINGS

- Always keep a register of attendants, and their contact details
- Keep a record of all proceedings and inputs
- Provide hand-outs with a summary of the presentations
- Provide comment sheets for completion by attendants
- When workshops are anticipated to last more than two hours, provide refreshments, to keep the bloodsugar levels of participants at a level that facilitates participation
- Provide translation services for home languages where the
workshops are conducted in English.

- Consider how to accommodate literate and non-literate attendants at the workshop.

### TECHNICAL NOTE 8: COMMUNITY MAPPING

#### Group mapping process

1. **Purpose**
   Decide what the map or maps should show (e.g. land use, hazards, resources, mobility, social facilities) and the best display method.

2. **People**
   Gather people who know the area and are willing to share their knowledge. Decide whether to work individually or in groups.

3. **Place and Material**
   Choose a suitable place (ground, table, wall) and materials (sticks, stones, seeds, pencils, felt-tips, chalk).

4. **Map making**
   Facilitators might help people get started but then withdraw.

5. **Discussion**
   Presentation of maps. Discussion on comparisons and lessons drawn. Notes of discussion made on flipchart or in notebook, see Figure 2.1 as an example.

6. **Record**
   Make a record of the maps on A4 paper for later use and/or take photos.

7. **Planning**
   Use the maps to start developing proposals.
   Running time: 1-2 hours
   Process also works for diagramming. Replace word ‘map’ with ‘diagram’.
   ![Diagrams](source: The Community Planning Handbook, Nick Wales, 2000)

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**Figure 2.3** Spatial Summary of Public Participation Issues – Klapmuts (source: CNdV, 2003)
3. PHASE 3: SPATIAL ANALYSIS AND SYNTHESIS

Having introduced the SDF to the public and received their feedback on issues and a spatial vision Phase 3 uses these inputs to guide in-depth spatial analysis of conditions in the Municipality. Outputs from this work will inform the compilation of the SDF in Phase 4.

In this phase the compilers of the SDF undertake a comprehensive investigation into all matters that have an implication for the spatial form and development of the municipality, so as to ensure that the SDF is strongly rooted in reality. This investigation is guided by the outcomes of Phase 2, particularly the spatial vision and issues raised and includes an understanding of the legal and policy context (already initiated in Phase 1), as well as the bio-physical, socio-economic and built environment of the municipality – the status quo.

Throughout this investigation it is of critical importance that the implications of the information gathered for the SDF is understood and recorded.

Finally this work is synthesized and interpreted in order to get an overview of the spatial issues and opportunities within the municipality.

3.1 Summary of findings of Phase 1 and 2

As a first step in this phase, the findings of the information gathered in Phase 1 and 2 are summarised and the implications for the SDF formulation unpacked. This will include the following:

3.1.1 Legal and policy context
The legal and national and provincial policy context and, importantly, the implications for the SDF were already investigated and summarised in Phase 1. Check that this work is complete and all relevant policies are included, as new information may have emerged during the various public engagements undertaken in Phase 2.

3.1.2 Implications of neighbouring SDFs
The information for this task was gathered in Phase 1 and during Phase 2, the status and implications of the proposals were discussed with officials of the relevant municipalities.

During this phase the relevant proposals of the neighbouring SDFs should be summarised and graphically illustrated, particularly proposals that will impact on development in the municipal area, such as development corridors that extend into the municipal area, “outside” growth nodes close to the municipal boundary or conservation areas that abuts the municipal boundary, see figure 3.1.

3.1.3 Summary of existing sector plans
Sector plans will inform priority issues and planning proposals. The SDF should not include the detailed information contained in the sector plans. It should reflect the needs and issues relevant to each sector. The SDF should direct the nature and location of sector proposals but will also integrate and reflect on the various proposals put forward by the sector plans. As noted in section 1.11, the formulation of the SDF may result in the need to revise some of the sector plans.

In this phase the implications of the existing sector plans for the SDF should be summarised. Annexure 2 lists the most common sector plans that have a bearing on the SDF and the aspects of these plans that may have implications for the SDF.

3.1.4 Issues raised in Public Participation (Phase 2)
As a final step in this sub-phase, the issues raised in Phase 2 should be summarised, with a view to understanding their implications for the SDF. It will be useful to summarise these issues in a table format that groups the issues according to themes. For each issue, list whether it is applicable to whole municipal area or a specific area only, what additional
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CNdV africa Planning & Design
1 September 2010

information is required to fully understand the spatial implications of the issue and a preliminary indication of the issue should be addressed in the SDF.

3.2 Status Quo Analysis

The status quo analysis presents the overall spatial picture of the municipality, i.e. the current situation, patterns and trends within the municipal area and includes the quantification of the needs and capacities of the municipality. The status quo analysis should not be a random collection of information for the sake of producing a report. Information gathering should be focused on the implications for the development of the municipality (for instance an understanding of the soils in the municipal area, will help direct growth away from arable land).

3.2.1 Analysis Matrix

The status quo information should be systematically unpacked, see figure 3.2 which list 26 key sectors grouped into biophysical, socio-economic and built environment which must be taken into account. It is important to map all aspects of the status quo investigation and analysis. Technical note 7 provides a set of recommended symbols and hatches to assist with mapping.

The analysis will be based on secondary sources of information, including the information forwarded by the public and other stakeholders during Phase 2. Specific attention should be given to understanding the issues raised during Phase 2. Where there is not sufficient information, the need for primary research should be a recommendation of the SDF.

The analysis matrix presented here provides a logical and focused system for understanding the status quo. This recognises that activities in a municipality occur as a multi-layered matrix in a single space – the geographical extent of the municipality. Although there is clearly exchange outside the boundaries, e.g. imports and exports, fiscal transfers, energy transmission and cyclical and permanent migration, ultimately the municipality depends on the resources within its boundaries.

Figure 3.2 illustrates this relationship by showing how the 26 layers of the analysis matrix are all interrelated within the spatial extent of the municipality, even though they may be separated for the purposes of research, implementation and management. At the macro level the layers are grouped into three categories:
**Biophysical environment**
This natural capital base is the primary or foundational layer on which the remaining two set of layers must feed in a sustainable way. Geology, soils and climate form the basic geomorphological relationship which gives rise to hydrological, topographical and biodiversity patterns. Agriculture and mining are included in this sub-set due to their close relationship with the natural environment.

**Built environment**
The built environment in turn reflects the socio-economic base and patterns in any given area. Although the built environments relationship with the natural resource base is thus derived rather than a primary relationship, it is the components of this built environment layer that impacts the most severely on resource sustainability.

Planning, heritage and environment are seen as three golden threads that impact on all the layers of the framework. There should be summary statements on all three of these aspects.

The heritage summary statement should include a brief description of the Municipality’s history.

### 3.2.2 Themes to be covered
Table 3.1 sets out the themes to be covered in the status quo analysis, based on the analysis matrix discussed in section 3.2. As indicated in the table, information should be mapped where possible, see Figure 3.3, 3.4 and 3.5 for examples. The analysis of each of these themes should be concluded with a summary of the implications of the information for the SDF.

### 3.2.3 Level of detail required
Based on an understanding of the scope of an SDF for the different types of municipalities, the level of detail will differ per type of municipality. As a general rule information gathered should be at a level below that of the SDF. Thus for a district SDF, information gathered should be at the local municipal level, and for local and metro municipalities, the information gathered should be gathered at the level of sub-areas, see table 3.1 and figures 3.4 to 3.13 for examples of mapping.

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**Figure 3.2 Status Quo analysis matrix**

**Figure 3.3 Eco-system Status for Frances Baard District Municipality SDF**
(source: CNdV, 2006)
An important aspect to consider when gathering and analysing base information, is the future monitoring of the implementation plan. Measurable targets will be based on the principles, vision and goals for the municipality. These will be formulated during Phase 4, but this aspect should already be considered in this phase.

For instance increasing densities in settlements will be an important goal for most municipalities (as this is a DFA principle). Thus it is important to understand and map current densities, as well as the infrastructure capacity to support higher densities. This example also points to the importance of gathering information from other departments (particularly engineering services), which will be an important function of the joint technical committee (see section 1.3).

The level of detail to be analysed in each theme or layer will also vary according to its strategic importance as identified by policy or public participation feedback.

Figure 3.4 Waste Water and Water Supply Services – Stellenbosch Municipality
Table 3.1: THEMES TO BE COVERED IN THE STATUS QUO ANALYSIS

<table>
<thead>
<tr>
<th>Theme</th>
<th>Aspects to be covered</th>
<th>Information to be mapped</th>
<th>Sources of information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-PHYSICAL ENVIRONMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geology and Soils</td>
<td>• Geology of the municipal area</td>
<td>• Geology</td>
<td>Surveyor General</td>
</tr>
<tr>
<td></td>
<td>• Soil types and capabilities</td>
<td>• Soil depths</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Type of land uses possible given the type of soil and depth</td>
<td>• Soil capabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climate</td>
<td>• Temperature</td>
<td>• Climate change risk and opportunity areas</td>
<td>South African Weather Service</td>
</tr>
<tr>
<td></td>
<td>• Rainfall</td>
<td>• Rainfall</td>
<td>Research on climate change (check with Provincial Government)</td>
</tr>
<tr>
<td></td>
<td>• Wind</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Climate change</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify climate change risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify areas most likely to be affected and opportunity areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Opportunities to provide alternative energy sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topography and slopes</td>
<td>• Mountain ranges, slopes, valleys and plains</td>
<td>• Topography</td>
<td>Surveyor General GIS department</td>
</tr>
<tr>
<td></td>
<td>• Farming landscapes and wilderness landscapes</td>
<td>• Slopes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Settlement areas or areas suitable for settlement</td>
<td>• Ridge lines</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Visual corridors and visual impact areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Settlement areas</td>
<td></td>
</tr>
<tr>
<td>Hydrology</td>
<td>• River systems, dams and catchment areas</td>
<td>• River systems, dams and catchment areas</td>
<td>DWA</td>
</tr>
<tr>
<td></td>
<td>• Sources of water supply</td>
<td>• Conservation areas</td>
<td>Local or District or Provincial Engineering Department</td>
</tr>
<tr>
<td></td>
<td>• Water quality</td>
<td>• and river conservation status</td>
<td></td>
</tr>
<tr>
<td>Biodiversity</td>
<td>• Eco-system status and conservation areas</td>
<td>• Eco-system status</td>
<td>SANBI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CBAs and ESAs</td>
<td><a href="http://www.bgis.co.za">www.bgis.co.za</a></td>
</tr>
<tr>
<td>Vegetation</td>
<td>• Vegetation types</td>
<td>• Vegetation type</td>
<td>SANBI</td>
</tr>
<tr>
<td></td>
<td>• Impact on human settlement e.g. fire prone areas</td>
<td></td>
<td><a href="http://www.bgis.co.za">www.bgis.co.za</a></td>
</tr>
<tr>
<td></td>
<td>• Impact of human settlement and other land uses e.g. agriculture on vegetation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3.5 Climate: examples from different regions

Average Annual Temperature and Rainfall: Bloemfontein 2000-2008
(source: SA Explorer – www.saexplorer.co.za)

Average Annual Temperature and Precipitation: Welkom 2000-2008
(source: SA Explorer – www.saexplorer.co.za)

Figure 3.6 Slope Analysis: Stellenbosch Municipality
<table>
<thead>
<tr>
<th>Theme</th>
<th>Aspects to be covered</th>
<th>Information to be mapped</th>
<th>Sources of information</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-PHYSICAL ENVIRONMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation and Heritage</td>
<td>• Provincial nature reserves</td>
<td>• Reserves and protected areas</td>
<td>• Local department dealing with public parks and nature reserves.</td>
</tr>
<tr>
<td></td>
<td>• Local authority nature reserves</td>
<td>• Heritage resources</td>
<td>• SANParks, Provincial conservation agency</td>
</tr>
<tr>
<td></td>
<td>• Private nature reserves</td>
<td></td>
<td>• SAHRA, Provincial heritage agency</td>
</tr>
<tr>
<td></td>
<td>• National heritage sites and conservancies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>• Existing agriculture and trends impacting on agriculture</td>
<td>• Valuable agriculture areas under threat</td>
<td>Department of Agriculture</td>
</tr>
<tr>
<td></td>
<td>• Soil depth and capability.</td>
<td>• Soil capability and land use options</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Land requirements for food security</td>
<td>• Land required for food security</td>
<td></td>
</tr>
<tr>
<td>Building Materials and Mining</td>
<td>• Brick quarries and reserves</td>
<td>• Location of mines and potential mining areas</td>
<td>Department of Mineral Resources</td>
</tr>
<tr>
<td></td>
<td>• Status of former quarries</td>
<td></td>
<td>Surveyor General (Geology Maps)</td>
</tr>
<tr>
<td></td>
<td>• Mineral resources available for mining</td>
<td></td>
<td>MINTEK</td>
</tr>
</tbody>
</table>
Figure 3.7 Conservation and Heritage: Cape Agulhas Municipality

Figure 3.8 Land Use: Tswelopele Municipality
<table>
<thead>
<tr>
<th>Theme</th>
<th>Aspects to be covered</th>
<th>Information to be mapped</th>
<th>Sources of information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIO-ECONOMIC CONDITIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic Profile</td>
<td>• Population figures and growth rates, population distribution and migration patterns</td>
<td>• Population distribution and migration patterns</td>
<td>Statistics South Africa (Stats SA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="http://www.statssa.gov.za">www.statssa.gov.za</a></td>
</tr>
<tr>
<td>Health</td>
<td>• Type and distribution of facilities</td>
<td>• Health facilities</td>
<td>District and Provincial Departments of Health</td>
</tr>
<tr>
<td>Education</td>
<td>• Type and distribution of facilities</td>
<td>• Distribution of facilities</td>
<td>Local department dealing with public facilities</td>
</tr>
<tr>
<td></td>
<td>• Level of education of population</td>
<td></td>
<td>District Municipality and Provincial Government</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Education Department</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Statistics South Africa (Stats SA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="http://www.statssa.gov.za">www.statssa.gov.za</a></td>
</tr>
<tr>
<td>Employment, Occupation and Income Levels</td>
<td>• Employment sectors</td>
<td>• Pattern of Income distribution</td>
<td>Statistics South Africa (Stats SA)</td>
</tr>
<tr>
<td></td>
<td>• Unemployment</td>
<td>• Location of employment:</td>
<td><a href="http://www.statssa.gov.za">www.statssa.gov.za</a></td>
</tr>
<tr>
<td></td>
<td>• Income profile</td>
<td>- informal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- formal</td>
<td></td>
</tr>
<tr>
<td>Land Reform</td>
<td>• Land restitution claims</td>
<td>• Current projects and claims</td>
<td>DRDLR</td>
</tr>
<tr>
<td></td>
<td>• Land reform projects</td>
<td>• Opportunities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Land reform strategies, including housing for rural people, small scale farming</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>opportunities and commercial farming opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cemeteries</td>
<td>• Existing cemeteries</td>
<td>• Existing and possible future sites</td>
<td>Local Engineering Department</td>
</tr>
<tr>
<td></td>
<td>• Capacities</td>
<td></td>
<td>District Municipality</td>
</tr>
<tr>
<td></td>
<td>• Possible expansion opportunities and opportunities for new sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Potential for integration into open space system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime</td>
<td>• Categories of crime and distribution of crime</td>
<td>• Distribution of crime and problem areas</td>
<td>SA Police Services</td>
</tr>
<tr>
<td>Property Market patterns and growth</td>
<td>• Growth pressures</td>
<td>• Patterns and growth pressures</td>
<td>Estate agents</td>
</tr>
<tr>
<td>pressures</td>
<td>• Property prices and rentals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Finances</td>
<td>• Municipal income and expenditure</td>
<td>• Distribution of municipal arrears</td>
<td>Local Departments (Finance, Valuations, IDP)</td>
</tr>
<tr>
<td></td>
<td>• Impact of growth and housing on municipal resources</td>
<td>• Amount and allocation of funding for projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Arrears for rates and services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3.9 Population Distribution: Stellenbosch Municipality

Figure 3.10 Distribution of project funding: Bultfontein
<table>
<thead>
<tr>
<th>Theme</th>
<th>Aspects to be covered</th>
<th>Information to be mapped</th>
<th>Sources of information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUILT ENVIRONMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hierarchy and role of</td>
<td>• Settlement patterns and structure</td>
<td>• Hierarchy of settlements, linkages</td>
<td>Sources of information: District SDF and IDP</td>
</tr>
<tr>
<td>settlements</td>
<td>• Role of settlements and growth potential</td>
<td>and investment priority within</td>
<td>Provincial SDF and IDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘Municipalities’ and to nearest</td>
<td>Development Perspective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>national and provincial centres</td>
<td>Van der Merwe report on growth potential of towns</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Western Cape only)</td>
</tr>
<tr>
<td>Settlement Densities</td>
<td>• Average gross dwelling unit densities</td>
<td>• Population densities</td>
<td>Population data, Statistics South Africa (Stats SA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dwelling unit densities</td>
<td><a href="http://www.statssa.gov.za">www.statssa.gov.za</a></td>
</tr>
<tr>
<td>Land Use Management Issues</td>
<td>• Development pressures</td>
<td>• Current town planning/zoning scheme</td>
<td>Land use management section of the municipality</td>
</tr>
<tr>
<td></td>
<td>• Problems and issues with current system</td>
<td>• Development pressures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• New development proposals / applications</td>
<td>• Recent and current applications</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(past 5-10 years)</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>• Transport networks</td>
<td>• Local transport networks</td>
<td>Integrated Transport Plan</td>
</tr>
<tr>
<td></td>
<td>• Public transport</td>
<td>(road, rail, public transport, NMT)</td>
<td>Local Department of Transport</td>
</tr>
<tr>
<td></td>
<td>• Non-motorist transport.</td>
<td>including distances to nearest</td>
<td>District and provincial Transport Departments</td>
</tr>
<tr>
<td></td>
<td>• Access and movement patterns</td>
<td>major towns</td>
<td>PRASA (Spoornet &amp; Transnet)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Walking distance from</td>
<td>Airports Company of South Africa (ACSA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>main nodes of opportunity</td>
<td></td>
</tr>
<tr>
<td>Water/Infrastructure</td>
<td>• Sources and supply volumes</td>
<td>• Capacities</td>
<td>Local Engineering Department</td>
</tr>
<tr>
<td></td>
<td>• Access to water</td>
<td>• Water supply infrastructure –</td>
<td>SANBI River Status Mapping</td>
</tr>
<tr>
<td></td>
<td>• Requirements and capacities</td>
<td>natural and built – bulk treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Qualities</td>
<td>and networks</td>
<td></td>
</tr>
<tr>
<td>Waster Water Treatment</td>
<td>• Infrastructure</td>
<td>• Water quality status</td>
<td></td>
</tr>
<tr>
<td>(sanitation)</td>
<td>• Capacities</td>
<td>• Areas of need / shortage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Requirements and proposed new sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid Waste Management</td>
<td>• Location of waste disposal sites</td>
<td>• Solid waste disposal sites and</td>
<td>Local Engineering Department</td>
</tr>
<tr>
<td></td>
<td>• Identification of new sites</td>
<td>future sites</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Opportunities for recycling and potential depots</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>• Infrastructure and capacities (where available).</td>
<td>• Electrical supply network</td>
<td>Local Engineering Department</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eskom</td>
</tr>
</tbody>
</table>
Figure 3.11  Walking Distances

Figure 3.12  Settlement Hierarchy: Tswelopele Municipality
<table>
<thead>
<tr>
<th>Theme</th>
<th>Aspects to be covered</th>
<th>Information to be mapped</th>
<th>Sources of information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUILT ENVIRONMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Telecommunications | • Infrastructure and networks
• Impact on landscape | • Coverage areas. | Telkom |
| Human settlements | • Estimated housing need at the different locations
• Estimated land requirements to address the estimated need
• Informal settlements | • Land identified for housing
• Informal settlement location including suitability for in-situ upgrading or relocation | Local Department of Human Settlements |
| Land | • Public and private land ownership
• Vacant land:
  - not used
  - under used
  - well located (within walking distance of node) | • Public land ownership
• Leases
• Land parcels either vacant, derelict or under-used
• Zoning | Local property department. Aerial photography / site inspections (Note: the fact that vacant land may be earmarked for future activities should not preclude its investigation and possible review of such proposals.) |
| Secondary Sectors: Manufacturing, Construction, Transport | • Sectors, spatial requirements and linkages
• Trends and growth potential | • Distribution of secondary sectors | Local Economic Department District and Provincial Economic Departments |
| Tourism | • Tourist attractions
• Spatial requirements
• Patterns and growth potential | • Location of tourist attractions | Local and provincial tourism bodies. Local Economic Department District and Provincial Economic Departments |
Figure 3.13  Ownership: Overberg ABP

Figure 3.14  Tourism Potential: Dikgatlong Municipality
3.3 Synthesis of the Phase 3 findings

This phase is concluded by a succinct yet comprehensive synthesis of the findings of the work done in Phase 3, with the focus on understanding the implications for the formulation of the SDF.

This synthesis should be structured in a way that reflects on the relationship between the various themes covered in the status quo analysis. Depending on the complexity of information the synthesis could be structured according to the three main layers, namely biophysical, socio-economic and built environment or by using the more sophisticated ecological socio-economic relationship framework, first introduced in section 1.9.

This framework illustrates the relationship between the Closed Ecological Cycle, see figure 3.15, and these underpinning layers of bio-physical, socio-justice and economic efficiency. The Ecological Socio-economic Relationship Framework indicates the dependence of the economic efficiency on human capital and social justice, which in turn are both

The Closed Ecological Cycle acknowledges that economic production cannot exceed human capacity and the resources that can be extracted from nature. In turn the cycle can only remain in balance if the waste outputs do not exceed the capacity of the environment to decompose them. Using this framework, the relationship between the themes investigated in section 3.4 becomes clear and the synthesis of the status quo analysis can be structured as follows:

- **Extraction**
  Primary economic activities such as mining, fishing, agriculture and forestry are directly dependent on aspects such as geology, soils, biodiversity and water resources. The outcomes of the investigation into the above themes should be summarised and the implications for the SDF indicated.

- **Human Reproduction**
  The ability of people to contribute to production, is related to their level development as indicated by demographic indicators, as well as the structure of settlements and the extent to which these settlements are efficient, convenient and pleasant to live in or not.

Indicators in this component of the closed ecological cycle include:
- demographic indicators:
  - education;
  - housing;
  - employment;
  - crime, etc; and,
- settlement indicators:
  - density;
  - levels of social and economic spatial integration; and,
  - quality of the urban environment.

- **Production**
  Indicators for economic production are mainly related to the secondary and tertiary sectors, using traditional tools such as measuring the contribution of sectors to GDP.

- **Decomposition**
  Indicators for this component of the closed cycle relate to performance of environmental sinks such as:
  - waste water treatment works,
  - landfill sites;
  - stormwater and river systems;
  - absorption of atmospheric pollution;
  - aquatic pollution; and,
  - cemeteries.

- **Enablers / destabilisers**
  In addition to the four key components of the closed cycle with their indicators as indicated above there are four external drivers to the framework, see figure 3.16, namely:

- **The property market**
  The dynamics of the property market impacts on the ability of the system to remain in balance. For instance the pressure to convert land from rural to urban uses, impacts on the extraction and decomposition components. Thus as part of this phase, property values and trends in the municipality should be summarised.

---

Figure 3.15 Closed Ecological Cycle
**Governance and legislation**
Efficient governance, with regard to aspects such as development control and the implementation of major projects, impact on the operation of the framework.

Briefly summarise the major issues related to governance and legislation affecting the municipality.

**Equity and inequality**
This driver refers to the link between the first and second economies and the extent to which activities decrease or increase the divide between the “haves” and “have-nots”. Consideration is needed of the impact of all decisions on this divide as deepening this divide will threaten the stability of the entire socio-economic system. Report on the main issues related to equity and inequality in the municipality.

**Funding and income**
This external driver relates to funding and the need to achieve the following incomes:
- Wages (labour);
- Capital (interest);
- Rent (land and property);
- Profit (business enterprises); and,
- Tax (such as rates, income tax and VAT).

Access to funding plays a major role in decision making and the extent to which framework is able to keep in balance.

Summarising key issues related to municipal income and spending, including issues such as arrears.

Can be done using a SWOT analysis:
- Strengths (internal)
- Weaknesses (internal)
- Opportunities (external)
- Threats (external)

This section should then be concluded with a summary of area specific and municipal wide issues, challenges and opportunities. This should be illustrated by a map or set of maps.
OUTCOMES OF PHASE 3

a) Quantification of needs and capacities. Information and data that can be measured and monitored such as population data, housing need, crime.

b) Quantification of infrastructure capacities and costs to address backlogs.

c) Spatial indication of infrastructure capacities and where it will be feasible to invest in new infrastructure and where to upgrade existing infrastructure.

d) Mapped information on the status quo themes.

e) Quantification of housing need, population growth and land requirements.

f) Qualitative assessment of performance of municipality against desired spatial form and principles.

g) Map or set of maps indicating municipal wide issues and area specific issues.

h) Synthesis map or set of maps indicating key spatial challenges and opportunities.

TECHNICAL NOTE 8: SYMBOLS

To be revised
4. PHASE 4: DRAFT SDF

The draft SDF proposals are formulated in this phase. They should be directly informed by:

- Policy and principles (Phase 1);
- Issues and vision (Phase 2);
- Status quo synthesis (Phase 3).

4.1 Objectives

“A Spatial Development Framework is required to describe in words and illustrations how the Municipality sees desirable future patterns of land use and development in its area of jurisdiction”. (Buffalo City Integrated Development Plan, 2002)

“The spatial development framework guides and informs all decisions of the municipality relating to the use, development and planning of land”... “Every municipality should have an indicative plan showing desired patterns of land use, directions of growth, urban edges, special development areas and conservation worthy areas...The plan should be flexible and able to change to reflect changing priorities of the municipality” (White Paper on Spatial Planning and Land Use Management)

(source: Mpumalanga SDF Guidelines Toolkit, 2010)

As first step in this phase, objectives for the spatial development of the municipality based on the spatial vision and goals, principles, issues raised by stakeholders and the findings of the status quo analysis are formulated.

Objectives indicate the desired long term result related to a specific aspect of the vision. Typically objectives could relate to the overarching themes of the status analysis, such as protection of the natural resource base, or the improvement of settlement structures. It should also describe the Municipality’s unique sense of place including those of its settlements where relevant. Where appropriate objectives should be measurable and expressed as key performance indicators that will inform the implementation of the monitoring and evaluation framework, see Phase 7.

4.2 Spatial tools and concepts

As a next step the spatial tools and concepts needed to achieve these objectives must be identified. The following tools and concepts will typically be required to address issues currently faced by municipalities:

a) Nodes

These are areas where a higher intensity of land uses and activities will be supported and promoted. Nodal development improves efficiency as it provides easy access and creates thresholds for a variety of uses and public transport services.

Typically any given municipal area would accommodate a hierarchy of nodes that indicates the relative intensity of development anticipated for the various nodes, the varying sizes of the nodes, and the dominant nature and activity of the nodes.

b) Corridors

Corridors are links between nodes, along which an increased intensity of development will naturally be attracted and should be encouraged. Similar to nodes they improve access to opportunities. Corridors should provide an appropriate level of access to the opportunities along the corridor and would typically include public transport routes.

c) Infill and densification

In addition to nodes and corridors, it may necessary to identify areas where infill development and densification will be pursued, as a tool to achieve spatial integration, increase population thresholds and address the legacy of apartheid through social inclusion (refer also section 4.3.1 for more detail).

d) Containment

This concept refers to the need to limit inefficient low-density development, typically through the use of an urban edge, which indicates the boundary for urban development for an agreed period of time.
e) Protection
This concept is explicitly aimed at protecting valuable natural, economic or heritage resources, such as agricultural land, wetlands or scenic landscapes. Protection may be required for components of settlements (e.g. the establishment of a network of green spaces in urban areas) or rural landscapes outside of settlements. An urban edge may also be used as a tool to achieve protection.

f) Growth Areas
The identification of appropriate future growth opportunities is an important aspect of an SDF. By proactively indicating such areas, based on the agreed the principles, the often negative impacts of unguided market forces can be curtailed. These can include the redevelopment of existing development areas to higher intensities, vacant land suitable for infill development as well as Greenfield sites.

4.3 Interventions for common issues facing municipalities
This section describes SDF proposals and strategies for common issues facing municipalities.

4.3.1 Settlement restructuring
Addressing the legacy of apartheid is one of the most critical issues to be addressed by the SDF. Issues that SDF proposals can address relating to this legacy include:

- Poor communities located furthest away from economic opportunities and social facilities;
- Vacant buffers between residential areas have resulted in low average densities and sprawling settlements that cannot support public transport;
- Poor quality housing and urban environments in township areas

Tools to address this include:

a) Infill development – especially in buffer areas left vacant between the residential areas set aside for different population groups. Be sure that the vacant land is well-located to afford access to opportunities for future residents, ensure appropriate densities consider a mix of uses and residential units and include urban design guidelines, see figure 4.1.

b) Densification through the sub-division of large residential plots, allowing second dwellings on large residential plots, or sectionalisising development on larger plots, see Figure 4.2.

c) Redevelopment
This may be particularly appropriate in areas with low density development conveniently located in relation to development corridors, major distributor roads or other amenities such as open spaces.
Redevelopment at higher densities around open spaces, not only increases overall densities, but also improves surveillance of the open space and provides more people with access to them, see figure 4.3.

**d) Upgrading of township areas**

Improving the quality of the environment in township areas, through upgrading sidewalks, landscaping, street lights, etc. will not only increase the value of housing in these areas, but may also attract investment from the private sector that will lead to increased opportunities for residents. Consider using the NDPG to fund such projects.

**e) Use of services roads or declassification of roads**

Roads that pass adjacent to township areas, often have limited access opportunities, due to their classification and nature (typically roads were used as buffers to “contain” townships). Consider declassification of such roads or the use of service roads, to allow residents to make full use of the opportunities of passing trade offered by such roads.

**f) Inclusionary housing policy**

Consider the introduction of a policy that requires new residential development to include a range of housing options that cater for a variety of income groups. Typically the total number of units are allocated to subsidised housing and/or the “gap” market.

### 4.3.2 Rural development

Addressing rural development issues remains a headache for local municipalities. Problems include the large distances between settlements and the marginal economic potential of small settlements. The NSDP promotes investment in infrastructure in areas with growth potential only, but basic services should be provided wherever people reside. In addition the CRDP includes proposals for promoting rural development. The following solutions can be considered:

**a) Provide off-grid services to small settlements that don’t have efficient access to service networks.** Solutions include the use of solar power, rain water harvesting and boreholes and ventilated improved pit latrines (VIPLs) e.g. enviro-loos. The capital investment in these low operating may be higher upfront, but the service costs will be more affordable to poor communities and municipalities in the long term.

**b) Establish periodic markets and combine these with other community services such as ABET courses and administrative services rendered by the Department of Home Affairs at strategic nodes.** Careful co-ordination of such markets in a district could assist in providing cost effective transport solutions.
c) Work with the Departments of Agriculture and Land Reform and Rural Development, and NGOs to identify viable land reform opportunities, particularly for small scale farming that will contribute to food security and could provide people with an extra income, through the introduction of co-operatives for instance.

4.3.3 Peri-urban settlement structures and scattered villages

The phenomenon of very low density “scattered villages” in rural areas, provides similar problems to those of far flung rural settlements, in that providing basic services to each residence is not cost effective. In addition distances to socio-economic opportunities are increased, see figure 4.4.

Figure 4.5 Scattered rural settlements: Lower Mayakgoro: Northwest

Solutions include:
- Provide off grid services to households as per section Error! Reference source not found. a);
- On-grid services can be provided to residences in walking distance from identified nodes (typically where schools, shops, and clinics are clustered); and,
- Encourage densification around these nodes, by enforcing a tight urban edge based on the principles described in section 1.9. This aspect will require discussion with residents and tribal authorities.

4.4 Conceptual Framework

The next step is to formulate a conceptual framework (CF), based on the spatial implications / imperatives of the vision and issues identified in the previous section, for the municipal area. This is a “blob diagram”, indicating how the vision for the development of the study area will be realised spatially, as well as how the issues identified in the previous phase will be addressed spatially, using the spatial planning principles and concepts.

The CF is essentially a diagrammatic illustration of the “idea(s)” that inform the SDF, which will be unpacked in more detail in the SDF itself. Figure 4.6 and 4.7 show examples of the graphics for a conceptual framework. Thus it should not be precisely drawn and does not provide the level of clarity that the SDF itself should.

Figure 4.8a, b, c and d show the differences between analysis, concept, SDF and implementation maps and plans. It is at the point of the conceptual framework the need for evaluating different scenarios may emerge. Once a particular scenario or single combination of a number of scenarios is chosen this can be taken forward to Spatial Development Framework. This will follow in the next level of planning.

Usually, and in addition to unique opportunities that may be present conceptual frameworks should identify:
- Generalised local land-use patterns;
- Key nodes and links and what activities these might focus on;
- No-go areas for urban development for environmental or agricultural protection; and,
- Key areas of opportunity or challenges.
4.5 Scenario Planning

In certain instances where issues and challenges are complex, development pressures considerable, and certain strategies, e.g. socio-economic integration or densification are controversial, it may be useful to formulate alternative scenarios for the future development of a municipality prior to formulating proposals. Scenario planning may be particularly useful in metropolitan areas and larger, fast growing towns where development pressure could result in inappropriate development.

Alternative scenarios should be based on the trends and issues identified in the status quo analysis. In effect they illustrate the outcomes of following certain trends or policy decisions. For the scenario planning exercise to be useful, the alternative scenarios should be realistic potential outcomes for the municipality.

As an example, the following scenarios were used in assessing growth management options for the town of Stellenbosch (see figure 4.9):

- Business as usual;
- Incremental growth;
- Restructuring and integration; and,
- Public transport.

Note that scenario planning will require another round of public participation as, generally, only one scenario or a single composite of aspects of a number of scenarios can be taken forward into the SDF for implementation. The public participation that will be required in this instance will be similar to the process to be followed in Phase 2.
4.6 SDF Proposals

After having clarified the development direction and vision with the CF, ‘the idea’ or CF should be applied to the contextual reality of the municipal area. The idea or concept will thus be ‘shaped’ to what is possible.

The SDF essentially indicates the following:

- what needs to happen and where to protect valuable resources;
- what needs to happen to change poor performing areas (e.g. where integration, densification and rural development can take place); and,
- where to direct growth in a sustainable manner

4.6.1 The SDF plan

Although the complete SDF document comprises a report that records all the phases of these guidelines, the term SDF also refers to the proposed future spatial development of the municipal area, as illustrated by the SDF plan. This plan should ideally be clear enough to be used on its own by a variety of stakeholders for guidance, such as:

- developers who want to check whether their proposed development will be supported;
- interested parties who wish to comment on development application; and,
- municipal and provincial departments who wish to locate community infrastructure such as clinics, schools and public transport infrastructure.

Following on the scope of the SDF as discussed in section 1.6, Table 4.1 indicates the contents of the SDF plan for each type of municipality.

4.6.2 Notes on formulating the SDF plan

a) Using the Ecological Socio-Economic Relationship Framework

The framework, described in section 3.3, can be used to unpack the SDF proposals in a logical manner, which also services to highlight the relationships between different components of the municipal environment.

Proposals will be unpacked in terms of the following themes:

- Extraction
  - Water
  - Land
  - Primary economy

- Social reproduction
  - Human development
  - Urban development

- Production
  - Secondary economy
  - Tertiary economy

- Decomposition
  - Environmental sinks
  - Recycling
  - Cemeteries

- Property market
- Governance
- Equality
- Income

b) Spatial Planning Categories

The designation of spatial planning categories (SPCs) will provide a useful point of departure to identify land to be protected from development and land where development can be accommodated. Based on the bioregional planning methodology (see also section 3.1.3), the following categories are suggested, see Table 4.2.

The write-up of the SDF should include an explanation of the main elements of the SDF, including a motivation as to why specific elements have been included where necessary (e.g. why was town X identified as the major growth node in the district, or a certain area identified for future growth).
c) Growth Potential of Settlements
The designation of the economic growth potential of settlements / the prioritisation of the urban settlements within the municipality should be indicated with respect to their relative levels of human need and economic potential so as to prioritise fixed investment and human needs programs. Where this information is not available or specialist studies have not been completed, available information (e.g. from municipal departments, and the IDP) and input from the public participation process should be used to determine which settlements have the highest potential for economic growth and where the highest socio-economic needs occur, see figure 4.9.

d) Land Ownership and Value
Land ownership should never be a determinant in formulating proposals for the use of land. In particular it should not determine the location of subsidised housing projects. Land should always be used for its best purpose, determined by its location and inherent attributes. This may result in the need for land swaps between private and public land holders.

In addition land outside the Urban Edge should always be valued based on its current use (not development potential) and then the most appropriate use should be allocated. The ownership of the land will then determine the institutional model used to implement the land use, e.g. public land outside of the Urban Edge suitable for agriculture could be used for land reform projects, whilst public land outside of the Urban Edge suitable for tourist resort development, could be developed in partnership with community / private organisations.

e) Spatial Budget
The formulation of a spatial budget is a critical component of an SDF. This budget should be based on a projection of anticipated population growth (both natural and through immigration), and the land requirements for the projected economic growth or housing need.

Note: in some cases local municipalities may have declining populations but still have housing and service backlogs in their settlements.

This budget should indicate the land requirements for residential development (based on an acceptable average density – refer to section f below), infrastructure to service this development, open space and land set aside for socio-economic uses. As a general rule of thumb 60% of land should be set aside for housing to achieve suitable thresholds to support public transport, businesses and social facilities.

The spatial budget should also make provision for non-urban land uses, such as land that has to be set aside for food security and small scale farming purposes. As a general rule the land requirement for food security is as follows, see Table 4.3:

f) Densification and Urban Edges
The demarcation of the urban edge is closely linked to the restructuring and compaction of the settlement and the spatial budget. Its alignment can be determined as follows:

Step 1, determine how much of future growth for an agreed period (at least 10 years) can be accommodated within the footprint of existing settlements at densities of average gross 25du/ha for large settlements requiring public transport or 12-15 du/ha for small rural settlements. This should include infill and densification to achieve the appropriate average gross densities.

Step 2, based on the above, draw an urban edge that will accommodate future growth in a manner that will result in an acceptable average density.

Note: the alignment of the urban edge will also be influenced by the need to protect valuable natural, agricultural and heritage resources beyond urban settlements. Given the history of low density urban development in South Africa it is likely that urban edges will initially have to be drawn tightly to promote densification. Figure 4.10 shows how a loosely drawn Urban Edge will undermine the principles of
settlement restructuring, compaction and densification by proposing excessive land within the Urban Edge. Figure 4.11 shows a tightly drawn edge for a small rural settlement that protects its agricultural resource base while still allowing space for expansion.

Figures 4.12, 4.13, 4.14 and 4.15 show examples of SDFs.

Figure 4.10  Loosely drawn Urban Edge: Bushbuck Ridge Local SDP

Figure 4.11  Tightly drawn Urban Edge: Settlement Guidelines: Elim, Cape Agulhas Local Municipal SDP
Figure 4.12 Metropolitan SDF: City of Johannesburg

Figure 4.13 Waterberg District SDF

Figure 4.14 Stellenbosch Local Municipality Draft SDF 2010

Figure 4.15 Sol Plaatje Local Municipality SDF
4.6.3 Guidelines for Settlement Plans at the local SDF level

In addition to the overall SDF for local municipalities, it will also be necessary to prepare maps and guidelines only for drawing up of detailed SDFs / Sectoral plans for the main settlements beyond the scope of a local Municipal SDF (refer also to section 1.6.1).

These should include:

- Areas to be protected (e.g. river conservation corridors, biodiversity networks, agricultural resources) and areas of limited/controlled development (e.g. heritage areas)
- Areas of intervention (to address poor performing existing settlement areas)
- Restructuring and integration areas
- Incremental growth areas
- Redevelopment, infill and densification areas
- New development areas within existing settlements or new ones (indicate location, form and densities of new development areas and how these will be integrated with existing settlement)
- Economic development nodes and/or linkages
- Services
- Transportation proposals:  
  - roads,  
  - rail,  
  - public transport,  
  - cycling,  
  - pedestrian

Figures 4.16 to 4.19 show examples of analyses and guidelines for sectoral plans.
<table>
<thead>
<tr>
<th>Metropolitan (sub-areas similar to local)</th>
<th>District</th>
<th>Local / metro sub-area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEP 1: HIERARCHY AND STRUCTURE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hierarchy and nature of nodes within the metropolitan area, particularly indicating nodes where economic growth and investment will be pursued, and those where social investment will take preference.</td>
<td>Hierarchy of settlements in the district, based on an understanding of the current and future role of settlements.</td>
<td>Hierarchy of existing and proposed settlements in the local municipal area, based on an understanding of the growth potential of settlements.</td>
</tr>
<tr>
<td></td>
<td>Generic guidelines only for settlement planning in the district’s local municipalities.</td>
<td>Spatial guidelines towards detailed sector plans for each settlement within municipality.</td>
</tr>
<tr>
<td></td>
<td>Guidelines should not be produced for each settlement.</td>
<td>Note: detailed sector plan for each settlement would be outside of the scope of a local Municipal SDF.</td>
</tr>
<tr>
<td><strong>STEP 2: NODES, CORRIDORS AND LINKAGES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corridors linking nodes, and the nature of these corridors.</td>
<td>Links between settlements and areas beyond the district boundary.</td>
<td>Existing and proposed linkages between nodes and important corridors within and between settlements in the local municipality.</td>
</tr>
<tr>
<td>Linkages to surrounding municipalities and the rural hinterland.</td>
<td>Existing and proposed linkages between</td>
<td>Linkages to surrounding local municipalities.</td>
</tr>
<tr>
<td><strong>STEP 3: PROTECTED AREAS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Areas to be protected, including natural, agricultural and heritage resources and urban open spaces.</td>
<td>Important natural, economic and heritage resources such as protected areas, agricultural areas, mining areas and scenic valleys and routes at the district level.</td>
<td>Areas where valuable natural, economic or heritage resources, such as agricultural land, wetlands or scenic landscapes should be protected and promoted.</td>
</tr>
<tr>
<td>Spatial implications of disaster management measures and areas affected by climate change risks.</td>
<td>Spatial implications of disaster management measures and areas affected by climate change risks.</td>
<td>Spatial implications of disaster management measures and areas affected by climate change risks including individual settlements.</td>
</tr>
<tr>
<td><strong>STEP 4: METRO URBAN EDGE</strong></td>
<td></td>
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<td></td>
<td>See section 4.6.2.</td>
<td></td>
</tr>
<tr>
<td><strong>STEP 5: INFILL DENSIFICATION AND THE SUBURBS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Areas where infill densification and urban renewal will be pursued, including investment opportunities into areas of economic blight.</td>
<td>Principles for infill, densification and urban renewal and protection.</td>
<td>Demarcation of areas where infill densification and urban renewal should be pursued, including investment opportunities into areas of economic blight.</td>
</tr>
<tr>
<td>Areas where low density growth should be limited/prohibited to promote efficient development.</td>
<td></td>
<td>Areas where low density growth should be limited/prohibited to promote efficient development.</td>
</tr>
</tbody>
</table>
### STEP 6: FUTURE LATERAL GROWTH AREAS (IF REQUIRED)

<table>
<thead>
<tr>
<th>Future growth areas</th>
<th>Points or areas of economic opportunity at the district scale</th>
<th>Future growth areas, such as areas identified for the development of housing, social facilities and economic opportunities. Areas where low density suburbs are appropriate towards the periphery of a settlement providing they are not near strategic points of high accessibility or amenity where densification should be promoted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas where low density growth should be contained to promote efficient development.</td>
<td>such tourism opportunities</td>
<td></td>
</tr>
</tbody>
</table>
4.7 Policies and guidelines to implement the SDF proposals

The Draft SDF has to include sections on how it will be implemented. Although the SDF will only be implemented in Phase 7 these must be documented at this point in the process so that they can be considered in Phase 5, final public participation and Phase 6, approval.

The SDF proposals are implemented in a number of ways through:
- through direct investment by the municipality in infrastructure and development (projects);
- policies and guidelines which provide the private sector and other stakeholders with the tools and incentives to implement the SDF proposals;
- Alignment with LUMS; and,
- Integration with the IDP.

For instance densification can be promoted through guidelines for land owners and developers on tools for densification, supported by a municipal policy that indicates that certain types of densification will be supported in certain areas. Incentives to promote desirable forms of development could also be included.

Policies and guidelines can be prepared separately to the SDF, especially where the issues to be addressed are complex. However, where stand-alone policies to support the SDF proposals do not exist, the SDF should include basic guidance its proposals can be implemented.

Note that district or provincial planning departments will in some instances provide policies and guidelines for adaption and use by municipalities.

4.7.1 Components of a policy statement

Policies and guidelines must be clear on what they are to achieve, the tools to achieve the desired outcome, who has to take action, and how their effectiveness can be measured.

Some policies will include specific measures e.g. policies for land use and land use change may identify the location and nature of densification to be supported whilst other policies refer more to general development goals e.g. a safer city.

4.7.2 Typical issues requiring policy statements and guidelines

- Densification and infill development
- Restructuring and integration
- Climate change adaptation and mitigation
- Heritage and conservation areas
- Provision of subsidised housing
- Transport and land use integration
- Agriculture and protection of agricultural assets
- Interface of development with the urban edge and amendment of the urban edge
- The management of fire and flood risks
- The development of resorts

4.8 Relationship with the Land Use Management System

Most municipal land use management systems, with town planning or zonings schemes as their main component, which date from the eighties and often much earlier. Since then there has been significant shifts in the theory and practice of spatial planning towards increased sustainability and social equity concepts which are not often not reflected in these LUMSs (especially with regard to the spatial legacy of apartheid).

These outdated systems often have a significant detrimental impact on the implementation of progressive SDFs aimed at achieving sustainability and equity. At the most basic level, the current land use rights afforded in terms of these schemes often do not support concepts such as densification, mixed use development or urban agriculture.

However, it has to be remembered that the existing LUMS contain real and enforceable rights over property and they can be amended through legal processes such as rezonings and subdivisions on formal amendment of the LUMs.

In order to address these issues, it will be necessary to compare the land use management implications of the SDF proposals to provisions of the land use management system. For instance, do the land use rights in areas indicated as development corridors allow for an increased intensity and mix of uses or will there need to be changes of use rights (i.e rezoning and subdivisions).

A GIS based system can be used to integrate the SDF proposals with attributes describing LUMs and other property information for each property in the municipality, see Annexure 4.

This is a complex data management exercise. However, if properly set up such a database will provide important management information for the Municipality, see Annexure 3.

Differences between the LUMS and the SDF can be addressed as follows:
- on a structured policy basis, e.g. the Council could pro-actively
inform landowners in an area designated as a development corridor that additional land use rights will be granted. This could be done through the introduction of an overlay zone, or even incentives.

- through a complete overhaul of the LUMS, which will require a formal amendment or replacement of the town planning/zoning scheme.
- on an ad-hoc basis as development applications are submitted.

If they are in line with SDF proposals they can be approved on a fast-track basis assuming other relevant issues such as environment, heritage, transport, infrastructure, etc. are satisfactory, or, if not an application can be considered on its merits and, if necessary, refused.

In both instances the legal implications for existing land use rights would have to be carefully considered.

Note: It should be remembered that SDFs even when approved do not automatically change the real rights of properties. These are controlled by LUMS.

The Implementation Framework is the public investment framework indicating where public funds are to be spent (what, where, who, when), see figure 4.20.

In addition to capital projects, the implementation framework should also include actions necessary to facilitate implementation of proposals (e.g. the development of a land use management system). This is not the same as a random list of further work to be done. Other examples include the identification of priority local area framework plans and the identification of implications for land use and zoning. The phasing of the implementation of proposals will be linked with resource availability and development preconditions (e.g. infrastructure capacity and implementation).

The Implementation Framework should also indicate the programme for meeting infrastructure requirements to support proposals.

4.9 Implementation Framework

4.9.1 What is the implementation framework?

Components of an Implementation Framework:

- Priorities – the order in which components of the SDF should be implemented according to the IDP or other prioritising processes;
- Phasing linked to resource availability; and,
- Development control guidelines.

4.9.2 Identification of projects

- Identify priority areas and needs;
- Identify requirements for proposed development and pre-conditions for implementation of proposals; and,
- Identify the public sector component of proposals.

These should be mapped and their linkage with the SDF clearly indicated, see figure 4.21.

4.9.3 Link to the budget cycle

The public investment component of the SDF plan and proposals should be programmed taking into consideration the resource constraints and budget cycles of the municipality as well as the budget cycles of other spheres of government in order to align delivery.

In order to budget and programme realistically, the following has to be taken into consideration:

- The pre-planning phase necessary to test and initiate projects.
- The planning, design and implementation phases of any particular project.

4.9.4 Methodology for integrating the IDP, SDF and MTEIF budget

The SDF is displayed on a large laminated board. At a session attended by Councillors and officials, the municipal budget, broken down onto coloured stickers indicating sector and rand amount is placed on the SDF according to geographical location. This will be an iterative process with the placement of stickers amended until an agreed financial and spatial distribution is achieved, see Figure 4.22.

4.9.5 Need for management action

Interventions addressing some of the spatial issues identified in the SDF may require operational solutions, e.g. management and
Figure 4.20  Stellenbosch SDF showing location of projects

Figure 4.21  Implementing a development project interim of the SDF: City of Johannesburg SDF Framework (source: City of Cape Town SDF)
maintenance tasks. These should also be listed.

Where other sources of funding are used, it will be necessary to link the implementation programme to such funding sources’ budget requirements and cycles.

4.10 Monitoring and evaluation framework

It is important to monitor and evaluate the impact of the SDF on the spatial development and performance of the municipality. It is through the process of monitoring and evaluation that aspects or components of the SDF that need to be amended or strengthened will be identified. Part of the evaluation framework should therefore be to outline the actions required if targets are not met.

The monitoring and evaluation framework is prepared as part of the SDF, although the actual monitoring, will only start in Phase 7 once the SDF has been formally approved. The preparation of the monitoring and evaluation framework entails the formulation of measurable goals or key performance indicators, that will assist in ensuring that the SDF is based in reality (i.e. preparing the monitoring and evaluation framework may require compilers to rethink some of the SDF proposals).

Some goals may also originate in the IDP, such as a target for job creation. This target will also have spatial implications – such as calculating the land requirements for creating a certain number of jobs in a specific sector, which must then be reflected in the SDF.

4.10.1 How to identify key performance indicators

The following aspects of the SDF should be monitored and key performance indicators linked to these:

- Performance of municipality in terms of desired spatial form and spatial principles (integration, equitable access, sustainability);
  - Set measurable goals e.g. densification targets for specific areas; and,
  - Indicate how and when spatial objectives to be achieved.

- Progress in terms of addressing issues and needs:
  - Decide on key baseline indicators and compare data on a regular basis.

- Delivery and implementation of public sector projects:
  - Set measurable goals for the implementation of capital projects and expenditure of other departments; and,
  - What is to be delivered, who is to deliver it, by when and how.

- Decision-making with regard to development applications:
  - Monitor and map decision-making that is/is not in line with proposals and spatial objectives.

- Progress with ongoing work identified as necessary to support the proposals:
  - Set measurable goals for undertaking of planning and other work and expenditure of operating budget.

Figure 4.23 show an example of targets from an IDP for an SDF extrapolated from a PGDS and District SDF and IDP to the local municipal level.

These can then, in turn, be interpreted spatially, e.g. land for a human settlement project or projects to accommodate the housing need.

The annual review of the IDP can be extended to include a component that reviews progress on achieving the objectives of the SDF. This will avoid the challenge of setting up a new and parallel monitoring institution that will require separate resources and energy.

<table>
<thead>
<tr>
<th>Target: PGDS</th>
<th>FBDM SDF</th>
<th>Dikgatlong</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 4-6% economic growth</td>
<td>4-6%</td>
<td>4-6%</td>
</tr>
<tr>
<td>2 Halve unemployment</td>
<td>25 263 jobs</td>
<td>2 788 jobs</td>
</tr>
<tr>
<td>3 Reduce hhld poverty by 5% pa</td>
<td>1555 hhlds pa</td>
<td>252 hhlds pa</td>
</tr>
<tr>
<td>4 Improve literacy rate by 50%</td>
<td>33 557</td>
<td>2 443</td>
</tr>
<tr>
<td>5 Reduce infant mortality</td>
<td>Reduce by 1/3</td>
<td>Reduce by 1/3</td>
</tr>
<tr>
<td>6 Reduce maternal mortality</td>
<td>Reduce by 2/3</td>
<td>Reduce by 2/3</td>
</tr>
<tr>
<td>7 Provide shelter for all</td>
<td>18 259</td>
<td>6 200</td>
</tr>
<tr>
<td>8 Provide clear water for all</td>
<td>6 444</td>
<td>1 113</td>
</tr>
<tr>
<td>9 Eliminate sanitation problems</td>
<td>18 892</td>
<td>3 589*</td>
</tr>
<tr>
<td>10 Reduce crime</td>
<td>Reduce by 10%</td>
<td>Reduce by 10%</td>
</tr>
<tr>
<td>11 HIV AIDS</td>
<td>Stabilise</td>
<td>Stabilise</td>
</tr>
</tbody>
</table>

Figure 4.23 Development Targets: Interpreted for Frances Baard District Municipality and Dikgatlong Local Municipality from the Northern Cape PGDS.
**TECHNICAL NOTE 8: SDF DOCUMENT**

Where the Draft SDF document is published separately from the Status Quo and other reports, it needs to include a summary of the outcomes of the previous phases.

The SDF plan and proposals is the essence of the municipal SDF and should consist of the following components:

- Objectives
- Principles
- Spatial proposals and strategies
- Policies (supporting proposals)
- Implementation Framework (public investment framework, investment priorities and priority programmes)

The SDF map should contain sufficient data so that it can be read/proposals are understood on its own.
### TECHNICAL NOTE 9: GUIDELINES FOR DENSIFICATION

#### DENSIFICATION FACTORS

1. **Departure Points**
   1.1 SA urban settlements generally have very inefficient thresholds due to their low densities.
   1.2 Having more people closer together will make public services more viable.
   1.3 Urban settlements need to work for the poor, i.e. those without cars, easy access to jobs etc.
   1.4 Land should be used for its best environment, social and economic use.

2. **General Guidelines**
   2.1 Promote average gross residential density of 25du/ha
       in urban settlements dependent on public transport.
   2.2 Promote average gross residential density of 15du/ha in small rural villages not dependent on public transport.
   2.3 Densities should increase toward major access routes and strategic centres or cross roads as follows:

- **Lower residential densities**
  - >1du/ha – 15du/ha alongside toward urban edge.

- **Medium residential densities**
  - >15du/ha – 50du/ha within 1km of major transport route.

- **High densities**
  - 50-250du/ha within
    - 100m of activity spines
    - in the urban core and CBD’s
  - mixed uses should be considered at higher densities

---

#### Table 1: Density Factors and their Application

<table>
<thead>
<tr>
<th>Residential Density factor</th>
<th>Plot size (Assume 60% of urban land for net residential use)</th>
<th>Appropriate Location</th>
<th>Configuration / zonin</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1du/ha – 5du/ha</td>
<td>1ha – 1200m²</td>
<td>Abutting and toward urban edge</td>
<td>Single Dwelling</td>
<td>Increase to a gradual transition to countryside.</td>
</tr>
<tr>
<td>2 5 – 15 – 20du/ha</td>
<td>1200 – 300m²</td>
<td>Maximum single dwelling</td>
<td></td>
<td>Suitable for abutting urban edge.</td>
</tr>
<tr>
<td>3a 25 – 75du/ha</td>
<td>250 – 80m²</td>
<td>&quot;Town houses&quot; (single dwelling)</td>
<td></td>
<td>Within walking distance of major routes.</td>
</tr>
<tr>
<td>3b 25 – 75du/ha</td>
<td>250 – 80m²</td>
<td>&quot;BNG&quot; / GAP housing (can be single dwellings)</td>
<td></td>
<td>Generally 2-4 storey apartments.</td>
</tr>
<tr>
<td>4 75 – 250du/ha</td>
<td>80m² to equivalent of &quot;24m² plot&quot; = multi-storey</td>
<td>Multi-storey</td>
<td></td>
<td>Suitable for urban context on major routes and within nodes.</td>
</tr>
</tbody>
</table>

---

4 Source of average gross residential of 25du/ha factor:

Studies around the world on densities at which urban settlements begin to perform efficiently have identified 100 people/hectare as the key threshold at which settlements begin to perform well, especially if they are dependent on public transport and want to optimize support for community facilities and small businesses. Below this threshold provision of reticulated sanitation as well as water and electricity services becomes extremely expensive.

In small rural settlement contexts where most of the residents should be living within walking distance of one another surveys have shown that they still perform optimally at average gross densities of 15du/ha.
3. Application

3.1 Should not go above 50du/ha in well located projects in rural settlements. Configuration should generally be freehold title / single plot althoughmaybe semi’s androw houses as with many historic rural villages.

3.2 Typical Cross-section

3.2.1 Urban Centres

Densification Guidelines : as per PDSF

3.2.2 Rural Centres

Densification Guidelines : as per PDSF

3.3 Densification and subdivision proposals should take into account environment and heritage and visual impacts and not be applied indiscriminately. Should be policy rather than status quo populist driven.

3.4 In general promoting urban restructuring – improving urban efficiency and promoting social benefits such as public transport should take precedence over narrow NIMBY interests.

3.5 There is a threshold where buildings on the landscape start to formasettlement andare not directly linked to rural primary economic activities such as farming, mining, or tourism. Although difficult to determine as a general rule a minimum gross density factor of >1du/ha for settlements and maximum <1du/10has can be used as a policy guideline.

This suggests that many peri urban villages should be regarded as rural settlements and not small farm homesteads. However, at densities below an average gross residential density of 15du/ha providing full urban civil services to these low density rural settlements will and has been extremely expensive and difficult to sustain.

3.6 Graphical language

There are four fundamental elements that are included in plans to help us understand, orientate and interpret them. In urban design projects we will seldom find illustrations fully explained without the use of a:

- Key
- title block
- north point
- scale.

Other graphic devices will aid communication, but should be used consistently and following graphic or more widely understood conventions. For example, most people in urban design will understand the difference between contour and boundary lines. When combined on a single plan there should be no chance of confusion or misinterpretation of what is depicted. The same applies to the use of colour, shading and annotation.

3.6.1 Key

It is vital to provide keys or legends, particularly on drawings when the information is not self-explanatory.

3.6.2 Title block

The title block establishes the authority of the plan or drawing. It should provide information about the author and owner, as well as the drawing itself. Drawings and plans may have a legal status and responsibility must be recorded. A title block should have the following information:

- drawing title
- drawing reference number
- the author
- the body taking responsibility
- scale (both written and drawn)
- date created
- revision number
- project codes.

All plans and drawings should be attributable and have a reliable point of reference. Clear layout and legible completion of added information are therefore essential.

3.6.3 North point

The north point should always appear on drawings. It is useful for establishing aspect and shadow paths but mainly for ensuring that all concerned orientate all drawings the right way up.

There are effectively three types of north:
• **True north** — the direction of a meridian of longitude which converges on the North Pole
• **Magnetic north** — the direction indicated by a magnetic compass. Magnetic north moves slowly with a variable rate and currently is west of grid north in Great Britain
• **Grid north** — the direction of a grid line which is parallel to the central meridian on the Ordnance Survey grid.

The UK convention is to use grid north, it is good practice to orientate plans with north at the top. Keep the orientation simple and consistent with other related drawings.

The north point is traditionally a decorative as well as a functional graphic device. The style may be used to reflect that of the project or the team, but it should always be obvious what it is.

### 3.6.4 Scale
The scale is a ratio used to represent actual size. Scaled drawings allow different levels of detail to be presented on similarly sized plans. There are three ways to show scale:
- numeric/written scale (1:100)
- scale bar
- grid lines.

Whenever possible the scale should be included on a drawing. The following scales are typically used in mapping and urban design.

### 3.6.5 Site location
Three different graphic techniques for indicating site location on both aerial photography and base are shown below.

### 3.6.6 Boundaries
Boundaries are an essential component of a plan — differentiating between discrete areas. The form of the line that marks out the boundary should be appropriate to what it is enclosing, and should be clearly different from lines on the plan setting out baseline information on existing landform and structures.

Boundaries can be:

- **Definitive** — showing precise alignment of boundaries. These are normally shown as solid lines and usually shown in red (if highlighting a site) unless this conflicts with other information.
- **Indicative** depicting general areas with broken lines that do not commit to precision and tend to be a series of curved rather than straight lines.

### 3.6.7 Arrows
Arrows are used to depict direction — of movement, of view, of sun path for example—but may also be used to point to key features in or beyond the plan. It is better to avoid using both on the same plan, but if this is essential then the forms of the arrows should be distinct and explained in the key. Arrows should be designed so that their outline cannot be confused with elements of the base plan.

### 3.6.8 Line weights/types
Lines can also represent paths, movement or links. A hierarchy of lines can be established by:
- width
- tone
- type.

The width of such lines can be used to represent the level of activity along a particular route. The tone of a line can be depicted by colour or shade and used to depict significance or emphasis. The type of a line — the relative interval of solid and space — can be used to depict levels of confidence or the provisional or conditional nature of what is depicted.

### 3.6.9 Logo
Logos are used to brand projects, organisations and products and to create a unique, consistent image. They should be easily identified and act as a memorable signature. They can play a vital role in marketing and promoting urban projects. However abstract, they should in some way reflect or respond to the subject. Those responsible should ensure that it cannot be misinterpreted, confused with another or offer opportunities for misuse. Logos are generally created from type and/or symbols.

### 3.6.10 Layering
Separate layers of information can be presented on a common base-map to aid analysis of different issues or themes relating to a proposal. This reduces clutter and avoids confusion. They can be presented on both 2-D or 3-D plans. The examples below show a masterplan delayered and presented as single themes. Presenting them separately on an identical base map allows easy comparison. Once issues are resolved it may be possible to incorporate multiple features on a single plan. This will be easier if they have been prepared to a common base.

### 3.6.11 Annotation
Annotation conveys additional information that cannot easily be presented by keys or graphics alone, typically when describing sites or development opportunities. Too much annotation will obscure the message to be conveyed by the image. If extensive annotation seems inevitable, separate explanatory text with clear references to the plan may be more appropriate.

### 3.6.12 Symbols and graphic shorthand
As the theory and practice of urban design have matured, so too has the
graphic language used to express the elements of townscape. While not being formal conventions, some symbols have come to represent specific conditions, such as a zigzag to express a noise-source or barriers to movement; lines with arrowheads to denote a direction of expansion or views. These and others have become common currency among urban designers.

Individuals and organisations devise their own ways of expressing symbols on drawings. The example opposite has been derived from traditional symbols. Some are consistent with Ordnance Survey and others have been developed over time by urban designers.

3.6.13 Contours
Contours are tines on a map that connect points of the same value. They most often indicate height (attitude), but may also be used to identify other relative values, such as distance in time from a particular point (isochrones) or noise levels from a particular source. They are normally depicted in fine brown or black lines with contour annotation orientated in the direction of the incline. Intervals at which the contours are shown depend on the scale.

3.6.14 Tone, texture and pattern
Tone describes the relative lightness or darkness of a colour or shade. In graphics practice, tones can be exploited to great effect, notably when it is necessary to use a single colour. When several colours are used, lighter and darker tones provide a means of differentiating graphically a hierarchy of values or relative degrees of intensity.

Textures can add depth and grain to areas on a plan where a more three-dimensional effect is required. They work particularly well in denoting areas such as woodland or rough terrain, distinguishing them from built form and surfaces which are expressed with smooth colour.

Patterns are generally used to delineate areas without definitive boundaries. Unlike textures, they do not create a depth or grain and can work well as an overlay to existing base information. Whether used as hatching, mesh or dotted areas, patterns can give an effective indication of proposed development, intended future phases or extension areas.

Used together, tone, texture and pattern add emphasis and energy to a plan, but it takes practice to combine them successfully and prevent the message being swamped by too many combinations.

3.6.15 Existing and proposed
Proposals must be distinct and clearly differentiated from the existing urban fabric. A clear and confident presentation will ensure that the audience understands what is proposed.

3.6.16 Expressing intensity and importance
The relative intensity or importance of a particular activity or variable can be expressed on a plan using a ranked scale to help interpret the implications of geographically-based data. Conventionally this is achieved by graduated shade or tone, with the most intense — or important — being expressed with the deepest or most solid colour. The graduation of colour should be balanced to ensure divisions are distinct enough to read independently and that the figure is not overwhelmed by the darkest tone where the most intense or important predominates in terms of area.

3.6.17 Colour logic
The standard land use colours established in post-war town planning in Britain are still widely applied, but modern colour palettes for presentations are largely a matter of individual taste. Practices and agencies will tend to develop their own preferences and some may have established house styles that influence a project graphics. There are, however, certain commonsense applications of colour, such as greens generally denoting soft landscape and planting. blues indicating water bodies, and darker, solid colours being associated with built form or building footprints. These are not hard and fast conventions, but to move away from them to more exotic colour ranges can confuse the message to the general public.

A colour palette should be used consistently across the whole range of images for a project, reinforcing its identity and aiding cross-referencing. These colours must work successfully at all scales, so that a given figure is equally balanced as a graphic image, whether within a leaflet or on an exhibition panel, where viewing distance can be critical.

3.6.18 Black and white images
Computer and printing technology allows us to use colour as easily as black and white. Messages presented in black and white, and shades of grey, may however be easier to understand, and certainly easier and cheaper to copy.
5. PHASE 5: ACHIEVING SUPPORT FOR DRAFT SDF

Phase 5 is focused on achieving support for the SDF proposals. This should be done as extensively as possible to solicit buy-in from a wide range of stakeholders. This is the second round of public participation.

Again, as with Phase 2 participation in this phase could be integrated with IDP forum meetings to save on resources and interface with stakeholders who have already demonstrated interest at this level. (Note: If scenarios were used to arrive at an agreed spatial concept and there was public participation for this phase would constitute the third round of public engagement.)

5.1 Abutting municipalities

As a first step in achieving support for the SDF, meetings will be required with abutting municipalities to discuss the proposals, particularly those with cross-border implications, such as:

- the role of corridors and linkages extending to neighbouring municipalities;
- the role of settlements in relation to those of the neighbouring municipality;
- conservation areas that abut/extend to neighbouring municipalities; and,
- the proposals for tourism resources.

Figure 5.1 shows examples of drawings prepared for this purpose.

The format of this engagement is ideally a workshop or forum where the relevant municipalities (refer to section 2.5 for details of who should attend) as well as the provincial planning department are represented.

The draft SDF or a reference to the availability of the draft SDF on the municipal website should be circulated to the attendees at least a week in advance. Where conflicts cannot be resolved, the discussion should be taken to higher level IGR structures such as the Mayoral Forums for a political decision.

Note that should a municipality representative be unable to attend this workshop/meeting, the preparers of the SDF must pursue the input and comment from this municipality (and keep a record of the steps taken to solicit this input).

5.2 Other government departments

Similar to engagement in Phase 2, the draft SDF will also have to be discussed with the relevant government departments as it emerged during the Phase 2 consultation process and subsequent Status Quo analysis and formulation of the SDF proposals.

Again ideally all government department representatives should be consulted in a workshop format, so as to highlight and resolve conflicts between the comments and proposals of the various departments.
This workshop should be minuted and the minutes circulated for endorsement. In addition government departments should also be requested to submit their comments in writing within an agreed period.

Should certain government departments not attend the workshop, the SDF preparation team should contact the representatives and request comment.

5.3 Key private stakeholders

Significant landowners, chambers of commerce and industry should also be engaged at this stage to try and align their development proposals with those of the SDF.

5.4 Political support

Once neighbouring municipalities and government departments have been consulted, the draft SDF should be presented to Council for endorsement and to make the draft available for comment.

This should take form of a workshop (dedicated meeting) with the full Council where the SDF is unpacked in detail.

5.5 Public input and comment on the draft proposals

Engaging the public in discussing the SDF proposals should follow a similar process to the first round of public participation, i.e. if the first round workshops were ward based, do this again. However, also consider any weaknesses in the first round of participation and rectify this, e.g. more workshops, use of different venues, and/or timeslots. These arrangements are to be agreed with the steering committee.

5.6 Inputs from sector experts

At this stage it may also be useful to discuss the proposals with representatives of specific sectors or one or two experts in a sector, particularly if one sector will be significantly affected by the proposals (for example the property development sector). Such meetings may also be requested by stakeholder groups interested in the outcome.

This could take the form of workshops with sector stakeholders such as the business fraternity, etc. (refer to Phase 2 section 2.3 for various options) or one on one meetings with sector experts.

Ensure that the participants have access to the proposals in advance (at least a week).

5.7 Dealing with controversial issues

Given the general need to restructure South Africa’s urban settlements and achieve greater equity in providing access to resources and opportunities, it is evident that SDFs should not reflect “a business-as-usual” approach to spatial development. However,
notwithstanding the social and economic importance of restructuring the spatial landscape controversy may arise in relation to certain proposals as resistance to change is a common human trait. Contradictory issues may also emerge during the formulation and consultation phase. The resolution of these issues should not unduly delay the finalisation of the SDF. When these issues arise, a political decision is required to the effect that the non-controversial or agreed aspects of the SDF will be finalised and implemented and that a process will be agreed to resolve controversial issues as speedily as possible, involving all stakeholders.

For example, such issues could be recommended for further investigation by the SDF rather than hold the process back as a whole while these are resolved.

**OUTCOMES OF PHASE 5**

a) Political endorsement of the draft SDF to be released for comment
b) A record of written and oral submissions from the public with comments on the draft SDF.
c) Agreement with affected municipalities on the alignment of the SDF proposals with the planning of affected municipalities
d) Alternatively an agreed way forward on the resolution of conflicts
e) A record of decisions regarding the alignment of the proposals with that of neighbouring municipalities.
f) A record of comment and input from affected government departments on the draft SDF.
6. PHASE 6: FINALISATION AND APPROVAL

Phase 6, the technical project committee should reflect on the input received from Phase 5, amend the SDF where necessary, submit the final Draft SDF to Council for approval.

It is vitally important that the amendment process is properly minuted, so that Council’s willingness to engage their constituents and consider their input as required by law is recorded (Refer to section 2.1).

6.1 Assessment of input received

As a first step the input received from Phase 5 will have to be assessed as to the relevance and validity of the comments.

It is suggested that the all the inputs from Phase 5 be arranged according to themes, in a table format, that also records by whom the comment was made, and in which forum (e.g. written submission or workshop)

Inputs and comments from the public/community stakeholders in particular will have to be assessed in terms of the following criteria:

a) Are the comments/suggested amendments based on new and factually correct information?

b) Are the suggested amendments reflective of the principles underpinning the SDF and will it contribute to the achieving the vision and goals of the SDF?

c) Are the suggested amendments practically implementable?

d) Will the suggested amendments be of benefit to the municipality as a whole (particularly the poor) or will it serve only narrow interests of small interest groups, e.g. landowners outside the proposed Urban Edge.

6.2 Deciding on amendments

Once the exercise of recording and assessing the proposed amendments and comments have been completed, the drafters of the SDF should prepare a proposed response to these comments and present this to the steering committee for discussion and decision. This proposed response should be captured in the combined record of comments and suggested amendments.

Once the matter has been discussed at the steering committee the proposed response can be finalized and the SDF amended accordingly.

6.3 Record of amendments

As a final step in this process, the record of amendments should be finalized with an indication of which aspects of the draft SDF has been amended.

Thus the complete record of amendments will consist of a table which lists:

a) Comments / suggested amendments according to themes.

b) Who made the comment and how/where.

c) The response to the comments (i.e. whether it is agreed to or not and the motivation for this decision).

d) The amendments made to the draft SDF document.

6.4 Endorsement by municipal departments and other government agencies

In order to lay a foundation for the implementation of the SDF the formal endorsement of all the relevant municipal departments for whom implementing the SDF might have financial, human resource or policy implications, as well as provincial government departments, in particular education, health, transport and housing, should be obtained prior to presenting the SDF to Council for approval.

6.5 Legal requirements for political approval

6.5.1 Municipal approval

In terms of section 25 of the Municipal Systems Act (Act 32 of 2000) a municipality must formally
adopt its IDP of which the SDF is a core component (section 26(e)). The IDP then guides all Council decisions with regard to planning, management and development (section 35). Thus, although there is no specific mention or use of the word “approval” in relation to IDPs or SDFs, it would seem that in essence municipalities approve their SDFs through adoption of the IDP.

6.5.2 Provincial approval
Once adopted the IDP has to be forwarded to the MEC for local government of the relevant province for comment. Section 33(5) of the MSA gives powers to the MEC (through an ad hoc committee) to force a municipality to amend its IDP if it believes that it does not comply with the MSA or is not aligned with the development plans or strategies of other affected municipalities or other organs of state.

It should also be noted that provinces may have their own planning legislation that allows for the preparation and approval of planning instruments such as SDFs. For instance the Gauteng Planning and Development Act (Act 3 of 2003) requires a municipality to prepare and adopt an SDF (section 31). Similar to the provisions of the MSA, the relevant MEC may also insist on amendments to the SDF (section 37). In the case of the Western Cape, a municipality may prepare a Structure Plan in terms section 4(6) of the Land Use Planning Ordinance (Ordinance 15 of 1985) which provides for the approval of the plan by the premier and binds the municipality to decisions which are consistent with the plan (otherwise a formal amendment of the Structure Plan is required).

6.6 National DRDLR notification
Once the SDF has been approved by Council and endorsed by the MEC depending on each province’s procedures, it should be submitted to the DRDLR for notification.

OUTCOMES OF PHASE 6
a) A succinct record of all comments and suggested amendments to the SDF, responses to those comments and amendments to the SDF.

b) A Council approved SDF, endorsed by the MEC or premier as relevant.
7. PHASE 7: IMPLEMENTATION

In this phase the implementation activities documented in the SDF, see Section 4.9, are actually carried out.

Implementation of the SDF includes the monitoring of the goals or key performance indicators, as well as the implementation of capital investment and policies. This process should start as soon as the SDF has been approved and endorsed.

7.1 Implementation

Convene a meeting of municipal joint technical committee, to discuss the implementation plan, programme and responsibilities. This committee could be one that is already in place to have oversight of IDP Implementation. Include the head of finance and IDP manager to ensure that budgetary provision is made for identified projects.

Agree on a vehicle for regular report back (either dedicated meetings or existing municipal structures).

There will be three main aspects to implementation;

i. using the SDF to guide municipal decision making in directing the location and nature of capital projects and operational activities, see section 4.9.4 for a suggested methodology. This will occur via the IDP and the budget – MTIEF. Figures 7.1 and 7.2 indicates a proposed project prioritisation process and possible project evaluation criteria;

ii. drawing up policies, incentives, and by-laws to facilitate implementation of the SDF by various stakeholders;

iii. development control (land use management) procedures for the processing of building plans and change of use applications.

Such revisions should be guided by the vision, goals, principles and spatial development proposals put forward by the SDF.

7.2 Monitoring

At the meeting referred to above, agree on responsibilities for monitoring the implementation of the SDF (i.e. who will track what information) as per the monitoring and evaluation framework prepared in Phase 5. Agree on the reporting format.

Applications for Human Settlement projects require information on how the project is aligned with the SDF, IDP and MTIEF. The agreed reporting format could be extended to other sectors to help ensure compliance.

7.3 Revision cycles

7.3.1 20 year horizon

The SDF should provide a 20 year spatial vision for the municipality. The SDF vision and proposals present a long term vision for the development of the municipality, see tracker diagram above.

7.3.2 5 year SDF amendments

Even though it forms part of the IDP, the complete SDF will not necessarily be reviewed on a yearly basis, but ideally it should be reviewed at least on a five year basis in line with the 5 year IDP cycle. A complete revision may be necessary after 10 years.

7.3.3 Annual revision

The implementation plan should be revised yearly, based on the outcomes of the monitoring and evaluation of the SDF. Specific aspects that may require annual or medium term revision, include:

- the identification of priority areas for intervention (as interventions address the issues in those areas); and,
- capital investment projects.

In addition criteria should be identified as part of the monitoring and evaluation framework of the SDF that will indicate the need to revise the SDF, such as new information that has come to light in sector plans (typically biodiversity information) and that will have a significant impact on land use proposals. Trends may also be
revealed by the pattern of property development applications which may require a review of the SDF.

Once it is agreed by municipal officials (joint technical committee) that the SDF needs revision, present the proposals to Council for a decision. Then reconvene the steering committee and restart the process, beginning with a formulation of the terms of reference.

### 7.4 Production and review of sector plans

Existing sector plans provided input into Phase 3 Spatial Analysis and Synthesis.

All sector plans, whether it be for a line function, e.g. infrastructure, transport, health, environmental management, disaster management or detailed settlement or sub-area development plans have a spatial underpinning which should be aligned with the SDF. For this reason, as well as if updating is required due to developments in a particular sector, revision of the sector plans can also occur as part of the implementation Phase 7, i.e. after the SDF is complete.

If there are compelling reasons why one or more sector plans should be produced concurrently with the SDF then care must be taken to ensure that spatial aspects are aligned with the SDF’s proposals.

This supports the notion of the SDF as a “chessboard” on which the sectoral activities of the Municipality play out.
ANNEXURE 1
PLANNING TERMS IN THE MAIN PROVINCIAL LANGUAGES
<table>
<thead>
<tr>
<th>Term</th>
<th>English</th>
<th>Afrikaans</th>
<th>Pedi</th>
<th>isiZulu</th>
<th>isiXhosa</th>
<th>Sotho</th>
<th>Tswana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridors</td>
<td>Corridors are links between nodes, along which an increased intensity of development may be encouraged. Corridors provide efficient access to a higher level of economic opportunities than would generally be the case in less structured space. They typically include public transport routes.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Density</td>
<td>The number of units per unit of land area, e.g. dwelling units/ hectare. There are five measures of density:</td>
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<td></td>
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<tr>
<td></td>
<td>i. population density: people / hectare</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>ii. gross dwelling unit density: dwelling units / total land area of a project or suburb including roads, public open space and non-residential land uses.</td>
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<tr>
<td></td>
<td>iii. net dwelling unit density: dwelling units/land occupied by residential plots only.</td>
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<tr>
<td></td>
<td>iv. building density: area of buildings / hectare.</td>
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<tr>
<td></td>
<td>v. settlement density: (dwelling units/ total land occupied by settlement) also known as average gross dwelling units density.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Densification</td>
<td>Densification is the increased use of space both horizontally and vertically within existing areas/ properties and new developments, accompanied by an increased number of units and/or population threshold (CoCT, Draft SDF, 2009).</td>
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<td></td>
</tr>
<tr>
<td>Term</td>
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<td>Sotho</td>
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</tr>
<tr>
<td>Efficiency</td>
<td>Development that maximises development goals such as sustainability, integration, accessibility, affordability, and quality of living, relative to financial, environmental, and social costs, including ongoing and future costs (Nelson Mandela Bay Municipality, 2007).</td>
<td>Development dat maximise die ontwikkelingsdoelwitte soos duurzaamheid, integrasie, toeganklikheid, voorraadbaarheid, en kwaliteit van die leef, vergelyklik met die financieel, en omgewings en sosiale koste, ook inklusief samehangende en toekomstige koste (Nelson Mandela Bay Munisipaliteit, 2007).</td>
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<tr>
<td>Infill Development</td>
<td>Development of vacant or under-utilised land within existing settlements in order to optimise the use of infrastructure, increase urban densities and promote integration.</td>
<td>Ontwikkeling van onbeheer of onbepaalde grond in bestaande nabyke oor die gebruik van infrastruktuur, om die bevolkingsdichtheid te verhoog en 'n integrasie te bevorder.</td>
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<tr>
<td>Integrated Development Plan</td>
<td>The strategic municipal development plan, reviewed on an annual basis, required by the MSA (Act 32 of 2000) which guides municipal decisions and budgets.</td>
<td>Die streeksmuniisipale ontwikkelingplan, beoordeel elke jaar, vereis deur die MSA (Aktief 32 van 2000) wat die munisipale besluit en boksetrome gids.</td>
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<tr>
<td>Land Use Management</td>
<td>Establishing or implementing any measure to regulate the use or a change in the form or function of land, and includes land development (S1, Land Use Management Bill, 2008).</td>
<td>Stel in of implement enige maatregel om die gebruik of 'n verandering in die vorm of funksie van land te reguleer en sluit die ontwikkeling van land (S1, Land Use Management Bill, 2008).</td>
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<tr>
<td>Land Use Management System</td>
<td>A system used to regulate land use in a municipality, including a town planning or zoning scheme, or policies related to how land is used on a plot by plot basis.</td>
<td>'n Systeem wat gebruik om die gebruik van grond in 'n munisipaliteit te beheer, insluit een stadsbeplanning of streekplanningsregime, of beledeger te reguleer hoe land op 'n plak per plak gebaseer is.</td>
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<tr>
<td>Term</td>
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<tr>
<td>Nodes</td>
<td>Nodes are areas where a higher intensity of land uses and activities are supported and promoted. Typically any given municipal area would accommodate a hierarchy of nodes that indicates the relative intensity of development anticipated for the various nodes, their varying sizes, and their dominant nature.</td>
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<tr>
<td>Scenario</td>
<td>A plausible and often simplified option of how the future may develop, based on a coherent and internally consistent set of assumptions about driving forces and key relationships (<a href="http://www.ipcc.ch/publications_and_data/ar4/wg1/en/annex1sglossary-p-z.html">http://www.ipcc.ch/publications_and_data/ar4/wg1/en/annex1sglossary-p-z.html</a>). Often a set of different scenarios are considered as part of the process of agreeing on a way forward.</td>
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<tr>
<td>Spatial Planning</td>
<td>Spatial planning is a planning process that is inherently integrative and strategic, takes into account a wide range of factors and concerns and addresses how those aspects should be arranged on the land. (<a href="#">White Paper on Spatial Planning and Land Use Management, 2001</a>).</td>
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<tr>
<td>Spatial Development Framework</td>
<td>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.</td>
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<tr>
<td>Sector Plans</td>
<td>Municipal plans for different functions such as bio-diversity conservation, housing, transport, local economic development and disaster management. They may also be geographically based, for example a sub-region, settlement within a local Municipality or a component of that settlement.</td>
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<tr>
<td>Stakeholders</td>
<td>Agencies, organisations, groups or individuals who have a direct or indirect interest in a development intervention or its evaluation (African Development Bank, et al, undated).</td>
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<td>Town Planning Scheme or Zoning Scheme</td>
<td>A legal instrument for regulating the use of land in terms of provincial or national legislation, see Land Use Management System.</td>
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<td>Urban Edge</td>
<td>A demarcated line and interrelated policy that serves to manage, direct and limit urban expansion (City of Cape Town, Draft Table Bay District SDP, 2009).</td>
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## ANNEXURE 2
### SECTOR PLANS AND THEIR IMPLICATIONS FOR THE SDF

<table>
<thead>
<tr>
<th>Legislation / relevant policies</th>
<th>Purpose and Scope</th>
<th>Relevance for SDF</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Strategic Environmental Assessment (SEA) / Environmental Management Framework (EMF)</td>
<td>Aimed at determining the environmental implications of policies, plans and programmes, as opposed to Environmental Impact Assessments (EIAs) that focus on a specific development project.</td>
<td>Provides:</td>
<td>In reality SEAs prepared to date are more focused on the biophysical environment (as opposed to socio-economic).</td>
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<tr>
<td>No specific provision in legislation for the preparation and requirements of a SEA although NEMA provides for the development of procedures for the assessment of the impact of policies, plans and programmes.</td>
<td>Identifies the social, economic and biophysical resources that should be maintained and/or enhanced</td>
<td>• Baseline information for the SDF (that would otherwise normally be included in the SDF)</td>
<td>Where an SEA has not been prepared yet, it could be commissioned as part of a phased development of the SDF (for instance in cases where there is not sufficient funding for a complete SDF).</td>
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<tr>
<td>In addition the Municipal Planning and Performance Management Regulations of 2001 (S2(4)(f)) stipulates an SEA as a component of an SDF.</td>
<td>Formulates sustainability objectives, criteria and indicators related to the resources identified (typically based on limits for acceptable change in the environment and reflecting existing standards in legislation for example, or developed through specialist input and stakeholder engagement).</td>
<td>• Sustainability objectives, criteria and indicators to be incorporated into SDF.</td>
<td>Where a complete SDF will be undertaken, the components of an SEA will be included in the SDF formulation, and there would be no need for a separate SEA.</td>
</tr>
<tr>
<td>Legislation / relevant policies</td>
<td>Purpose and Scope</td>
<td>Relevance for SDF</td>
<td>Comments</td>
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<tr>
<td>Environmental Management Frameworks (EMFs)</td>
<td><strong>Prepared in terms of NEMA (S24) and the EIA regulations (Chapter 8) published in April 2006.</strong></td>
<td><strong>Main purpose is to assist environmental authorities (national and provincial) when making decision in terms of EIA regulations. (An approved EMF is an important tool facilitating environmental approval for development applications.)</strong>&lt;br&gt;  - Maps natural and cultural / social resources and features (attributes),&lt;br&gt;  - Assigns a relative value to these resources.&lt;br&gt;  - Identifies activities that will impact on the resources.&lt;br&gt;  - Indicates how to manage impacts, through control measures that will ensure the long term sustainability of these resources.</td>
<td><strong>Provides:</strong>&lt;br&gt;  - Valuable base information to an SDF (similar to an SEA),&lt;br&gt;  - Guidance on land use management policy.</td>
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### Bioregional Plans

Prepared in terms of Chapter 3 of the National Environmental Management: Biodiversity Act (NEMBA) (Act 10 of 2004)

- The purpose of a Bioregional Plan is to inform land-use planning, environmental assessment and authorisations, and natural resource management by a range of sectors whose policies and decisions impact on biodiversity.
- It maps critical biodiversity areas (CBAs) and ecological support areas (ESAs).
- It provides accompanying land-use guidelines aimed at avoiding loss or degradation of natural habitat in critical biodiversity areas and maintaining ecological functioning in ecological support areas (SANBI, 2009).

Similar to an SEA and EMF a Bioregional Plan provides:
- Baseline information to the SDF
- Guidance on land use management

NEMBA requires that a bioregional plan may not be in conflict with an existing SDF and other policy plans. However once a bioregional plan is published by the Minister or MEC all future planning should consider the bioregional plan.

The provincial environmental authority would usually initiate the preparation of a bioregional plan, prioritising sensitive areas or areas containing valuable biodiversity resources (such as coastal areas or biodiversity hotspots).

SANBI will make the bioregional plan available for use once it is published.

### Integrated Environmental Management Plan

Chapter 5 of NEMA describes and promotes the appropriate environmental management tools to achieve integrated environmental management of activities.

This is simply the collection of various environmental management tools being applied by municipalities, including SEAs, EMFs and Bioregional Plans noted above. (Mangaung Municipality, 2004)

An IEMP provides a summary of all the key aspects of the various environmental management tools.

The plethora of environmental management tools is likely to cause confusion amongst all stakeholders. It would be prudent to discuss the need and relevance of any of the tools noted above with the various spheres of government, particularly at the provincial and district level, before embarking on the preparation of these plans. At this stage, it would seem that EMFs are particularly important as their implementation would have the potential to shorten land use application processes once approved.

### Human Settlement Plans (HSPs) / Housing Chapter of IDP

No specific legal provision for HSPs. However, it should be noted that section 9(1) (f) Housing Act states that every Municipality must take all reasonable and necessary steps to ensure appropriate housing development....

Informed by government housing policy, Breaking New Ground (2004) which shifted focus from merely delivery housing units at scale, to

As there is no legal requirement for ISHSPs the scope and content may vary. At a minimum an HSP will indicate:
- Housing needs/backlogs in the municipal area
- Planned subsidised housing projects, including layout plans, indicating densities and subdivisions (prioritised)
- A business plan, with at least a 5 year horizon, for

Provides:
- Information on housing needs
- Information on proposed and approved housing projects

In turn the SDF should guide the location and nature (density & typology) of new housing projects, as well as the supporting community facilities and other land uses that will be

The provision of subsidised housing has a profound impact on settlement patterns and the space economy, an HSP is critically important to an SDF. Ideally an SDF should precede the preparation of the HSP, in order to guide the location and nature of new housing projects.

Where an HSP already exists proposals for new housing projects should be assessed based on the spatial vision for

5 Areas required to meet biodiversity targets
6 Areas that are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of critical biodiversity areas and/or in delivering ecosystem services.
the creation of human settlements based on sustainability principles and aimed at empowering home owners.

Note: in some instances provincial housing policies and requirements for HSPs have been published

delivering the projects
- BNG indicates that rural housing interventions are likely to be strongly directed towards the installation of infrastructure rather than the development of housing.
- Identify suitable well-located land.
- Determine and demonstrate social viability of settlement, growth trends, migration trends and informal settlements.

**Integrated Transport Plans (ITPs)**

| Prepared in terms of section 27 of the National Land Transportation Transition Act (Act 22 of 2000) at the request of the MEC | Presents the vision, policy and objectives for transport, consistent with national and provincial policies and with due regard to IDP. |
| | Includes a planning for transport infrastructure development and maintenance, public transport provision, managing travel demand, non-motorised transport, planning for the transportation of hazardous substances |
| | Prepared for a 5 year period and includes a business plan, indicating the budget for the implementation of the plan |
| Provides baseline information to SDF with regard to existing infrastructure and transportation needs. |
| Provides input to SDF proposals with regard to realistic future transport infrastructure planning. |
| Should ideally follow on the SDF and be guided by the vision for the spatial development of the municipality. |
| Where an approved ITP exists it should be considered in the preparation of the SDF. Conflicts are to be highlighted and resolved at the time of the revision of the respective plans. |

the municipality. Where there are conflicts, the relevant officials will have to prepare a proposal on the resolution of these conflicts and present this to the Council for a decision.

| City of Tshwane Integrated Transport Plan | | |
| | | |
### Heritage Resources Register

Heritage resource registers are prepared in terms of section of 8(4) of the National Heritage Resources Act (Act 25 of 1999) (NHRA).

- The purpose of a heritage resources register is to afford heritage resources protection in terms of the NHRA.
- A register maps and grades all heritage resources in a municipal area.
- A register would ideally be supported by a heritage management policy that will provide guidance on land use management issues that will impact on heritage resources (no specific legal provision for this).
- In addition to the register and policy, a municipality may also designate protected areas in its zoning scheme or by-laws with a view to managing the impact of development on heritage resources in such an area.

- Provides information to the SDF that will assist in identifying areas for protection (e.g. cultural landscapes) or areas were change and restructuring should be controlled.

As registers are prepared in terms of the criteria of NHRA, they are not influenced by existing spatial planning and land use policy – they are focused on protecting existing resources.

However policies for management of heritage areas (as opposed to individual resources) should consider the proposals of the SDF, such as areas for densification and assist with providing management guidelines that can satisfy both restructuring and conservation objectives.

### Integrated Waste Management Plan (IWMP)

Prepared as an Environmental Management Plan in terms of S16(2) and (4) of NEMA.

- IWMP addresses refuse removal, street cleansing and waste disposal facilities and sites, i.e. deals with solid waste.
- Analyses the status quo with regard to the above, projects demand and formulates strategies to address the issues as well future demand, including operational and infrastructure requirements.

- Provides information on the status and need for additional waste disposal sites, to be addressed in the SDF.
- Requirements for waste recycling to be considered in SDF.

Examples accessed included very limited mapped information.

### Amajuba District Municipality Waste Management Plan

![Amajuba District Municipality Waste Management Plan](image-url)
## Water Services Development Plan

**Prepared in terms of S14-18 of the Water Services Act (Act 108 of 1997)**

Guidelines for WSDP have been prepared by the DWA. Note that the WSDP addresses both water supply and waste water (sewerage) services. A WSDP addresses:

- Existing and future demand for water services
- The quantity and quality of water sources
- Water services infrastructure – existing and future requirements
- Strategies to address water demand management and loss of water
- Operational income and costs and capital expenditure (projects to improve service delivery)
- Institutional arrangements

Provides information regarding:

- The capacity of service networks and bulk infrastructure to support new development and programmes for expansion.
- The status of water sources and the need to protect these resources.
- The need to consider alternative water supply methods in for instance rural areas, where networks are not cost effective.

Ideally the WSDP should follow on the SDF, so as to ensure that future infrastructure provision will support development that is aligned to the spatial vision on which the SDF is based.

## Social Development Programme

No specific legal requirement for a Social but S153 of the Constitution, which stipulates inter alia that municipalities must promote the social development of the community

As there is no specific legal provision, there are no guidelines published for social development programmes. Not many examples of such programmes, prepared as sector plans have been found. The programmes are often included in the main body of the IDP or sometimes combined with LED strategies of a health sector plan.

**Typical issues addressed include:**

- Early childhood development
- Substance abuse
- Sport and recreation
- Youth development
- Adult education
- Poverty alleviation
- Public Safety

Depending on the scope of the plan, may provide valuable information to the SDF regarding aspects such as the location of communities in need, (where food security should be addressed for instance), the need for infrastructure and facilities so as to provide easy access to social opportunities.

No examples of mapped information could be found.

## Health Sector Plan

Prepared by district and metropolitan municipalities in terms of S33 of the National Health Act (Act 61 of 2003) (NHA).

Covers a variety of aspects, such as environmental health issues, including air, & water pollution, dumping and littering, food vending, and community health issues, such as HIV/Aids, and other communicable diseases, and the provision of primary health care (at clinics) and awareness of health issues.

- Provides information on environmental health issues, such as the pollution of water sources.
- Provides information on health concerns amongst the population and facilities available to address those concerns.

The role of local municipalities in the provision of health care and services is being phased out (ito of S34 of the NHA).

Information is mostly not mapped.

## Disaster Management Plan (DMP) & Disaster Management Framework (DMF)

Required ito of S26(g) of the MSA as a component of an IDP and S42 and S53 of the Disaster Management Act (Act 57 of 2002)(DMA)

DMPs are prepared by local municipalities and DMFs are prepared by district and metro municipalities, and must be consistent with national and

- Provides information on no-go areas for development as well as areas where only certain types or forms of
### Guidelines for the Formulation of SDFs

**CNdV africa Planning & Design**

1 September 2010

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**Provincial DM Frameworks**

- The purpose of these plans is to prevent, mitigate, and react effectively to a variety of disasters, as defined in the act. The scope of these plans/frameworks include:
  - The identification of potential disasters
  - The identification of areas, communities, and households at risk
  - Measures to reduce the vulnerability of risk areas
  - Prevention and mitigation strategies
  - Contingency plans and emergency procedures in case of disasters

Typically these plans address natural and human-caused disasters such as flooding, fires, chemical spills, earthquakes, dam failures, contagious diseases (both human and animal), aircraft accidents, food-security.

**Local Economic Development Strategy**

- No specific requirement for an LED strategy, but S153 of the Constitution, which stipulates inter alia that municipalities must promote the economic development of the community, and S26(c) of the MSA which requires local economic development aims as part of the IDP, are often cited as the motivation for LED strategies

Typically includes an analysis of the local economy and policy context (including the economic sectors and socio-economic indicators), followed by a strategy, based on the issues identified, which includes actions and projects

- Provides information on the nature of the local economy – including the main drivers of the economy, thus giving an indication of sources to be protected.
- Provides socio-economic information
- Proposed actions and projects to be considered for inclusion in SDF.

Information is often not mapped, nor are actions for intervention.

**Area Based Land Sector Plan (ABLSP)**

- No specific legal requirement for this plan. Initiated by the then DLA, to speed up and promote sustainable land reform at the municipal level

ABLSPs are aimed at:
  - Identifying opportunities for land reform
  - Identifying potential beneficiaries of land reform
  - Integrating land reform into the IDP

- Provides information on land reform projects, and resources related to land reform, such as biodiversity resources, land, and agriculture.
- Includes proposals for the promotion of various aspects of land reform, including food security to be considered in the SDF.

It is understood that these plans are being phased out, in part due to the legal and administrative difficulties in achieving supply driven land reform projects.
Drakenstein Area Based Land Sector Plan

Consolidated Rural Development Plans (CRDP)
ANNEXURE 3
GENERIC TABLE OF CONTENTS OF AN SDF

1. Introduction
   1.1 Background to the report
   1.2 Terms of reference & scope of work
   1.3 Legal status and requirements
   1.4 Study area
   1.5 Planning Process

2. Context
   2.1 Policy context
      2.1.1 National policies
      2.1.2 Provincial policies
      2.1.3 Local policies
   2.2 Neighbouring planning (as may be applicable)
      2.2.1 District Municipal SDF and other spatial planning
      2.2.2 Local Municipal or Metro SDFs

3. Vision and principles
   3.1 Spatial Vision for the Municipal area
   3.2 Key principles to inform the SDF
   3.3 Objectives of the SDF

4. Spatial Analysis and Synthesis
   4.1 Bio-physical environment
   4.2 Socio-economic environment
   4.3 Built environment
   4.4 Synthesis of spatial issues and opportunities

5. Proposals
   5.1 Spatial Tools
   5.2 Conceptual Development Concept
   5.3 Spatial Development Framework Proposals
   5.4 Spatial Policies and Strategies
   5.5 Implications for Land Use Management

6. Broad Settlement Proposals (per settlement)

7. Implementation Plan
   7.1 Priority projects
   7.2 Phasing and development preconditions
   7.3 Monitoring and Evaluation Framework
ANNEXURE 4
GIS BASED SYSTEM SHOWING RELATIONSHIP WITH THE LAND USE MANAGEMENT SYSTEM

TYPOLOGY MAPS

The maps illustrate the categorisation of the open space into the various typologies, the purpose of which is to assist with management and maintenance, an example of which is shown in Figure 4.2.

The typologies have been developed in consultation with a wide range of stakeholders and the intention is that they should become a standard set of terminology used by all.
## CMA MOSS PHASE II: INTERROGATION PHASE  SUBDISTRICT 12: MIKRO PARK

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<th>REMARK (Source: OMO)</th>
<th>OWNERSHIP</th>
<th>ZONING</th>
<th>ZONING SIZE + 1.000m²</th>
<th>OWNERSHIP GAME</th>
<th>STRUCTURE PLAN PROPOSAL</th>
<th>DETAIL PLAN</th>
<th>EXT PLAN</th>
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<th>NATURE</th>
<th>ZONE</th>
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### Example of Spreadsheet
Date of commencement: 1 May 2010, except for Chapters 6, 10 and 11, item 15 of Schedule 2 and Schedule 5 of the Act and Chapters 1, 8, 9, and 12 and Schedule 1 of the Act in as far as it relates to the alteration, suspension and deletion of restrictions relating to land; the KwaZulu-Natal Planning and Development Appeal Tribunal and provincial planning and development norms and standards, that came into operation on 1 March 2009; repeal of Chapter 1 of the Town Planning Ordinance 27 of 1949 relating to the KwaZulu-Natal Planning and Development Commission which will come into operation: 7 November 2010; section 89(3), 161(1) and the repeal of the provisions of the Town Planning Ordinance 27 of 1949 relating to applications for special consent as contemplated in section 67bis of the Ordinance (PN 54 in PG 424 of 22 April 2010) (p9) (Legalbrief Today, Juta’s Weekly Statutes Bulletin 17 of 2010, 25 May 2010. http://www.legalbrief.co.za, Visited on 25 may 2010)
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