Sustainable Community Planning

GUIDE

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EDITORIAL NOTES

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Foreword

This planning guide presents an approach that aims to address and improve conditions in our cities and towns. Though all municipalities have undertaken many projects since our new era of democracy began in 1994, it has become clear that we need a comprehensive new approach to re-planning entire cities. Integrated Development Planning has been the guiding concept for municipal planning in general, and this guide takes this approach further in three important ways.

Firstly it applies integrated development planning to urban spatial and structure planning, taking account of social, economic and environmental considerations. To achieve this, it identifies Sustainable Community Units as distinct planning units at an intermediate level between the city or town level Spatial Development Framework (SDF) and the local neighbourhood level. This has hitherto been a significant gap in our planning approach that has made it difficult to link and integrate SDF and detailed planning.

Secondly the guide places Sustainability alongside Integration as a second great guiding principle that is increasingly recognized as essential in all development thinking, given the increasing environmental problems that we face alongside our social and economic challenges. It shows how sustainability is essential in all these aspects.

Thirdly the guide elaborates urban spatial planning principles that will lead to more integrated and sustainable cities, and most importantly, it gives many practical examples of how these are applied in practice. It doesn’t only deal with the question of what is desirable, but also how to achieve it, in that it describes how to organize the planning process as a complex process involving many stakeholders, and how to achieve community participation in planning.

We thank all those within the municipality who have contributed their valuable time to this project in spite of very busy schedules, the Swedish consultants and South African consultants, Sida as project sponsor, and all others who have contributed.

Hopefully this guide will prove to be most useful to ourselves and other municipalities in planning the integrated and sustainable cities and towns that we need in order to provide a good quality of life for all our communities.
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This book is intended as a practical guide and resource to help planners, professionals, community representatives and politicians understand and apply sustainable community principles in planning processes, in order to achieve more integrated and sustainable towns and cities with a better urban environment and quality of life.

The planning guide introduces new development and planning principles and a participative planning process that is particularly relevant in South Africa, given:

- the legacy of divided apartheid cities, with townships as strategically isolated ‘labour dormitories’ with minimal facilities and services
- low-cost areas with rows of standardised houses on square grid layouts
- urban sprawl with its high transport and environmental costs
- widespread poverty and high levels of unemployment in vast peripheral informal settlements

This planning guide is the culmination of a long process that began with the development of a Comprehensive Urban Plan for Port Elizabeth, which included Sustainable Community Units (SCUs) as a basis for intermediate level planning and as the building blocks for the city (metro). The SCU concept was later elaborated in a concept report on which this guide is based (Sustainable Communities Project, September 2005, published by NMBM). The concept was then tested in actual planning for the Bloemendal area, as a delineated SCU, which resulted in the Bloemendal Pilot Report.

The aim of this planning guide
The planning guide aims to share the principles and methods developed, as a basis for a new approach to urban planning that will result in integrated
and sustainable cities and towns. It is intended for use by all stakeholders involved in urban planning, including planners and other professionals in municipalities, other government departments and the private sector, as well as community representatives.

**How to use this planning guide**
The guide as a whole articulates a new and comprehensive approach to urban planning at the intermediate or Sustainable Community Unit level. As such it deserves reading and study from beginning to end, and is intended to stimulate thinking about and discussion of what is presented and suggested. The intention is to contribute to developing the capacity of planners and other stakeholders, which is the only way in which a new approach will become recognised and sustained. Learning in this sense requires some effort, and is greatly enhanced where undertaken by teams working together in real planning processes.

It could also be a useful text in the education of new planners, both in universities and as part of induction and orientation in the workplace. At best the planning guide may be adopted by municipalities or planning departments as a guide to their preferred approach, which they require staff, consultants and other stakeholders to understand and follow.

While clear on principles, the guide does not provide a simplistic recipe or a set of standard solutions, but rather an approach for others to understand and adapt to their own particular situations. Innovation and creativity in developing better and varied design solutions in different contexts is fully endorsed. Many and varied examples are included to illustrate the approach, give a sense of practical results and benefits, and inspire others to get seriously involved in further developing what is suggested in their own practice.

It will also be fruitful to share and give feedback on any projects that follow this or similar approaches – we need more examples of good urban planning from which to learn.

The guide is also designed to be used on an ongoing basis as a practical reference and guide on specific matters and in relation to practical questions such as:

- How do we organise stakeholder participation in the planning process?
- How do we involve other departments and agencies?
- What are the phases of the process?
- What are the options for types and layouts of housing?
- How is transport planning to be done?
- What should a baseline study cover?

To enable this type of use, the contents and overall layout are designed to facilitate the finding of particular sections and themes. As with any useful tool, its actual usefulness will depend on how well it is used. Hopefully it will often be at hand on desks, at team meetings, lively discussions and presentations to stakeholders, and be shared with and lent to others, who will then want their own copies. Further ideas on using the guide for capacity building and for strengthening learning in the planning process are included in chapter 5.
Integration and sustainability are essential for efficient development, balanced urban structures and equal opportunities for different groups in society.

Sustainable Community Planning

Sustainable Community Unit Planning is a planning methodology devised in the Nelson Mandela Bay Municipality (NMBM) which fills the planning gap that existed between Spatial Development Framework Planning (SDF) which deals with the broad level metropolitan or citywide planning and more detailed layout planning. In this way the spatial planning at sustainable community planning level, also called a Local Area Spatial Development Framework (LASDF), translates the overall vision and principles into more concrete and implementation related guidelines. It also provides a basis for detailed planning, sector planning and project identification. In this way the different levels of spatial planning will be appropriately interlinked.

The Sustainable Community Unit concept involves defining planning areas in terms of a reasonable walking distance i.e. 2 km or 30 minutes from a central area. Fundamental to the concept is the notion that the majority of local daily needs for any inhabitant should be within a reasonable walking distance of the home.

The concept is not only for application in new planning areas but also in revisiting existing planning and development in established areas, to increase compliance with the concept.

The basis for sustainable community planning is found in the development principles that have been adopted at national, provincial and at local government level, and which are supported by legislation and government policies. The development goals and principles of particular importance for spatial planning in Sustainable Community Units are:

GLOSSARY

**efficient development** urban development that maximizes development goals such as sustainability, integration, accessibility, affordability and quality of living, relative to financial, environmental and social costs, including ongoing and future costs.

**balanced urban structures** areas that have a balance of different uses (residential, services, economic activities and recreation) and of built and green environments.

**Spatial Development Framework – SDF** an overall plan for the physical structuring and development of a municipal area.

**special needs groups** HIV/AIDS affected persons, children, the aged and people with disabilities.
Integration & Sustainability

<table>
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<th>DEVELOPMENT GOALS</th>
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<td>• Poverty alleviation and the satisfaction of basic needs</td>
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<td>• Densification</td>
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<td>• Reducing urban sprawl</td>
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These development principles should be reflected in spatial plans and urban development in different ways. The spatial structure of a Sustainable Community Unit will have certain characteristics related to a combination of functional elements. The following elements have been identified:

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<th>FUNCTIONAL ELEMENTS</th>
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<td>• Housing</td>
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<td>• Work</td>
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<td>• Character and Identity</td>
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Each of these elements will be incorporated in the spatial planning and provide a focus for the realisation of the development principles. The spatial form will contain the elements, and can be assessed according to the extent to which the principles have been achieved. The Sustainable Community Unit will have different urban structures depending upon the type of area and its location within the municipality, but the overall structure and elements should manifest the principles.

GLOSSARY

corridor development

densified development along major routes where mobility, accessibility and the provision of public transport concur

densification

increasing the number of residential or other units per specified area, e.g. by building adjoining units, multi-storey buildings and having smaller plots

urban sprawl

low density, inefficient land use that extends the urban edge unnecessarily
The Spatial Development Framework (SDF) for Nelson Mandela Bay Municipality provides the basis for sustainable community planning.
This will result in sustainable urban development and integrated, safe, dynamic and vibrant environments based on community participation.

The Spatial Development Framework (SDF) is a part of the Integrated Development Plan (IDP) process

The Municipal Systems Act requires that all municipalities develop in IDP and SDF. After adoption of the IDP by a Municipal Council, the SDF is binding on the local authority for a period of 5 years. Newly elected Councils may adopt the IDP of the preceding council or develop a new IDP, taking into account the existing IDP.

The SDF must be reviewed annually, which could result in amendments that can only be effected by following a statutory process. The SDF covers the entire municipal area and provides the basis for all other levels of spatial planning, including Sustainable Community Unit planning.

Integrated Development Plans

IDPs are comprehensive five year plans for all areas of municipal responsibility including:
- Land and housing delivery
- Basic service provision
- Infrastructure development and maintenance
- Local economic development
- Care of the environment
- Poverty alleviation
- Local democracy, public participation and accountable governance

Municipal Systems Act 32 of 2000

Sustainable Community Units were delineated during preparation of the SDF for NMBM

Glossary

IDP

Integrated Development Plan
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**Integrated Development Plans**

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*Municipal Systems Act 32 of 2000*
In working with spatial planning in Sustainable Community Units the methods, processes and content are guided by the development principles that are formulated at national level and covered by legislation and Government policies. These principles are also incorporated in the vision and policies of the NMBM.

The overarching goals for development are integration and sustainability. These goals are achieved through application of the development planning principles that have been identified as fundamental for sustainable communities.

The sustainable communities concept defines the critical planning principles that promote the various aspects of integration and sustainability.
The Sustainability and Integration Imperatives
It is generally recognised that current and past planning methodologies and practice have not resulted in sustainable and integrated cites.

Whilst it is internationally recognized that cities need to strive towards greater sustainability in all dimensions of the concept, the integration imperative is particularly relevant to South African cities and towns due to the apartheid legacy that has to be overcome.

Both sustainability and integration have a number of dimensions which are relevant to planning and development. These overarching goals of the SCU concept can be achieved by applying planning principles that promote and reflect the different dimensions of sustainability and integration. How this can be done is described in the following pages.

Guidelines for defining Sustainable Community Units

- Based on walking distance from centre to periphery ± 30 minutes or ± 2 km
- Focus on pedestrian movement and cycling
- A variety of housing types and tenure options
- Social facilities – schools, clinics, crèches, community centres, libraries, cultural centres, recreational and open space
- Services and job opportunities closer to places of residence
- Mixed use development
- Flexible – adapted to existing local conditions
- Linked by public transport to other parts of the city

GLOSSARY

development principles
key values that guide development

imperatives
things that must be done

pedestrian movement
walking

integrate
combine and harmonize different functions and/or groups
Sustainable Community Planning Guide | CHAPTER 2 – DEVELOPMENT PRINCIPLES

INTEGRATION

Economic integration

Social integration

Functional integration
2.1 Integration
Integration includes the following dimensions:
• functional – mixed use areas with good infrastructure and services
• social – different social and cultural groups
• economic – a mix of different income groups and economic activities

Functional integration
Functional or physical integration involves creating development that is not mono-functional or sterile. The aim is to create lively and interactive living and working areas where all dimensions of activity including cultural, educational, economic and others are catered for.

The result of functional integration is the availability and accessibility of a range of services and amenities required for daily life. Functional integration can be achieved through the implementation of mixed use, higher densities, infilling, and the co-location of living, working, service and recreational opportunities.

Benefits include local income generation, accessibility of goods and services, reduced need to travel and transport goods, lower financial and environmental costs, a diverse and dynamic urban environment and a more efficient provision of infrastructure and other services.

Social integration
Social integration involves facilitating a diverse and vibrant population mix in a community where all population groups are catered for. This includes catering for different cultural, age, ability and income groups.

Social integration can be achieved through the provision of mixed housing, different land tenure and financing options and variations in available erven and dwellings. It can also be achieved through multi-purpose community centres and through the strategic location of business centres, markets and institutions.

The benefits of social integration include social interaction, co-operation, understanding and tolerance, people from different backgrounds enriching one another, cross-cutting interest groups, overcoming differences and enhanced human resources and capacities available in communities.

Economic integration
Economic integration results in a community that reflects a diversity of income groups. It will also have a range of different scales of economic activities and possibilities and opportunities.

This can be achieved through the conscious provision of spaces and opportunities for the full range of economic requirements for a community, such as urban agriculture, small-scale selling, markets, entrepreneurial centres, business support and the more traditional opportunities such as commercial activity areas.

The benefits include increased employment opportunities, local buying power and ultimately a more economically successful community.
Sustainable Community Planning Guide | CHAPTER 2 – DEVELOPMENT PRINCIPLES

SUSTAINABILITY

Environmental sustainability

Social sustainability

Economic sustainability
2.2 Sustainability

Sustainability, like integration, has a number of dimensions. These relate to the environment (green), social aspects and economic viability and sustainability which are essential considerations when planning and developing urban communities.

**Environmental sustainability**

Environmental sustainability involves the protection and conservation of non-renewable natural resources. Greater sustainability is achieved through:
- Ensuring sufficient open spaces
- Limiting pollution
- Protecting sensitive environments
- Ecological construction methods
- Use of renewable energy sources such as solar or wind power
- Protecting agricultural land
- Ecological sanitation systems
- Recycling and minimisation of solid waste

**Social sustainability**

Social sustainability involves meeting the basic social needs of all communities. This includes ensuring diversity in communities as well as democracy and participation in planning processes.

It can be facilitated through community participation in planning and development, creating democratic institutions, gender sensitivity and equality, transparent and fair planning and allocation processes and prioritizing the needs of the poor and disadvantaged groups.

**Economic sustainability**

This means adequate employment and livelihood opportunities in a community as well as economic growth and increasing general and individual prosperity. Economic sustainability can be assisted by adequate access to education at all levels, redistribution of wealth via subsidies and social grants, ownership of assets, affordability, creation of work opportunities via public programmes, financial and technical support to businesses and by encouraging local production, trading and service provision.

**Sustainable development** means the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves the present and future generations;

**Environment** means the surroundings in which human beings live and that consists of:
- the land, water and atmosphere of the earth
- micro-organisms, plant and animal life
- interrelationships among and between the above
- the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being;

**Environmentally sustainable**, in relation to the provision of a municipal service, means the provision of a municipal service in a manner aimed at ensuring that:
- The risk of harm to the environment and to human health and safety is minimised to the extent reasonably possible under the circumstances
- The potential benefits to the environment and to human health and safety are maximised to the extent reasonably possible under the circumstances
- Legislation intended to protect the environment and human health and safety is complied with

**Glossary**

- **economic sustainability** the ability of an area or community to earn income in order to cover its costs on an ongoing basis
- **non-renewable resources** natural resources that cannot be replaced once used, e.g. oil, coal, natural gas, natural forests
- **ecological** in harmony with nature and the environment
- **livelihood** the means whereby people live or make a living
- **solar power** the heat of the sun used to heat water or generate electricity
- **wind power** electricity generated by wind-driven generators or turbines
- **assets** things owned that have significant economic value

INTEGRATION & SUSTAINABILITY

PLANNING PRINCIPLES

- Poverty alleviation – meeting basic needs
- Focus on special needs groups – HIV/AIDS affected persons, children, the aged and people with disabilities
- Gender equality and equity
- The environment – physical, social and economic
- Participation and democratic processes
- Local economic development
- Accessibility – public transport and pedestrian focus
- Mixed use development
- Corridor development
- Safety and security
- Variation and flexibility
- Densification
- Reducing urban sprawl
2.3 Planning Principles

The SCU concept relies on defining the critical planning principles that promote the various aspects of integration and sustainability and applying them in the planning and re-planning of defined Sustainable Community Units.

The principles defined exist in the international planning arena as good practice, but are also embodied in the legislation and policy relating to development in South Africa. These principles are interrelated, and when applied as a ‘package’ in planning processes, they will enhance the overall sustainability and integration of towns and cities. The principles are described below.

Poverty alleviation and the satisfaction of basic needs

It is necessary in any planning intervention to focus on poverty alleviation and satisfying at least the basic needs of communities such as water and sanitation. This is more important in poor communities where even basic needs are not satisfied, as is the case in many places in South Africa and throughout the world. This may also involve moving people from areas and situations that are life threatening and dangerous such as flood plains, tip sites etc.

The aim of the planning intervention must therefore be to ensure that basic services are provided such as water and sanitation so that at a minimum everyone has access to facilities that do not compromise their health and safety.

In addition to this there must be realistic and practical mechanisms such as LED to overcome poverty. This can include home-based agriculture to satisfy nutritional needs and small-scale sale as well as higher order economic activities. The Expanded Public Works Programme (EPWP) and its principles of labour based construction methods and accredited on-site training should be implemented wherever possible.

Education and access to education at all levels is also important with regard to this principle.

Focus on special needs groups

In all societies there are special needs groups that must be catered for. Solutions will vary according to the particular situation.

In the South African context the high incidence of HIV/AIDS and the consequent high number of orphans and street children must be reflected in planning solutions.

Other special needs groups that need to be catered for would include the disabled, aged and children. Identifying the special needs groups and their requirements in any community must be done prior to identifying any planning solutions with those groups. Communities will more readily be able to identify their special needs groups.

Gender equality and equity

Gender equality and equity promote social integration and are fundamental to both social and economic sustainability. This is a basic principle for development generally in South Africa and is embedded in the Constitution. Achieving gender balance will have a positive impact in terms of social and economic aspects of the society.

HIV is not just a disease. It is a human rights issue.

Nelson Mandela
Due to the inequalities in the present situation, gender equality requires a specific focus on women empowerment, which includes preferential treatment, encouragement and promotion of women in all spheres of life. Sustainable communities planning with gender sensitivity is closely related to community participation. Emphasis on the community and household perspective incorporates gender equality. In the participatory planning process the involvement of women is important and the means for participation must be promoted through appropriate location and timing of consultation.

A gender balanced planning approach would be apparent in improvements in housing provision, outdoor play facilities, safety and security and accessibility to services. Opportunities for home-based work, small scale businesses and access to markets are essential to promote women in economic activities and development.

The environment – physical, social and economic
The emphasis on the environment as a planning principle involves incorporation of environmental aspects in all urban development. The environment includes physical, social and economic concerns and implies protection as well as sustainable utilisation and management of resources.

At the sustainable communities planning level the environment as a planning principle will be apparent in the provision of green areas, public open spaces and linkages between natural and built environment. Social concerns in terms of cooperation between different groups of people, sense of togetherness, stability and security will be provided for in the planning process and in the urban structure. The economic environment within community units will be promoted by informal business, small-scale economic activities and self-help development. Technical infrastructure that promotes environmentally friendly methods and renewable resource use should be developed, together with pollution control, waste management, energy saving and protection of biodiversity.

Local Agenda 21 provides a framework for an environmental focus at the community area level of planning. It promotes holistic approaches to development based on community involvement, awareness building, self-help and environmental protection.

Participation and democratic processes
Public participation is a general principle in planning that has specific significance at the Sustainable Community Unit level. While the Spatial Development Framework deals with vision, long-term strategies and metro-level planning, Sustainable Community Planning enables communities to participate in and influence planning for development in their area in concrete ways.

Community participation is an integral part of transparent and accountable democratic processes and it is important that the political and administrative systems provide for participatory approaches at all levels. The structure of municipal committees, planning teams, task teams, steering committees, ward committees and community development forums should encourage participation and involvement and should be actively used in the planning process.
Participation includes access to information, opportunities to submit comments and views, involvement in the planning, decision-making and implementation processes and mobilisation of people to take on responsibilities in the building and maintenance of community areas.

Participation promotes a sense of togetherness, identity, common vision and goals and sharing of responsibilities. It helps communities to take an active part in planning and development and use their own initiative to solve problems and address community needs.

Local economic development
Local economic development (LED) is crucial to achieve improved living conditions and promote sustainability. At the sustainable communities level, local economic development is particularly important as it contributes to local income earning, local markets and improvement of informal businesses.

LED includes provision for informal businesses, urban agriculture, small scale business support, employment creation and enterprise development. In the sustainable community context it will provide access to work within convenient distances for the inhabitants and markets for goods and services for the business sector.

LED will be part of the planning and implementation process and the required facilities will be integrated in the urban structure. Within the Sustainable Community Unit, economic activities and support will include home-based and communal food gardens, informal business sites, local markets, mixed land use, business support centres and business parks.

LED is important for the promotion of sustainability in general and it has a particular impact on the role of women and poverty reduction.

Accessibility – public transport and pedestrian focus
Accessibility must be a primary consideration in planning any city or town. All parts of a city must be well connected and accessible through public transport as well as for the movement of goods and people in order to allow the city to function economically as well as socially and to enable greater integration. No part of the city should be inaccessible to any of its inhabitants due to poor roads or lack of public transport.

At a Sustainable Community Unit level the connection of the Unit to other parts of the city is vital, especially by public transport. This is particularly necessary for poor communities that have fewer private vehicles. Accessibility to other parts of the city will increase the range of social, recreational, cultural and work opportunities available to a community. This will enrich society and enhance integration and sustainability.

A pedestrian focus in planning is important as most people do not own vehicles and other transport options are costly. It is for this reason that the concept of Sustainable Community Units emphasises the need to provide the requirements for daily life within walking distance of households. Safety from a technical as well as crime perspective is an important aspect of the pedestrian focus as people need to feel safe while using the pedestrian network and it should be able to be used at all times of the day and night.

Within the Sustainable Community Units provision should also be made for cycling.
Mixed use development
Mixed use development is a planning principle that directly provides for functional and social integration. The location of different uses in proximity to each other facilitates access, and promotes efficient urban development. It promotes sustainability through more efficient use of resources and infrastructure, reduction of transport and travel needs, accessibility to services, efficient public transport and interaction between different groups in the society. Mixed use development will have a positive impact on the character of areas, providing for a more dynamic and lively environment and greater variation in the urban structure.

Mixed use can entail combinations of housing, businesses, commercial, social, recreational and educational services and work places. It will provide for more efficient use of land through co-location and institutional co-operation. Mixed use development in most cases results in higher densities and can be located along activity corridors and public transport routes, and adjacent to central service nodes and commercial centres.

Corridor development
The concept of corridor development has been adopted in national legislation and policy to promote activity corridors with higher residential densities, mixed use and public transport viability. Corridors also allow for land use and transportation to reinforce each other. The interaction between the transport corridor and land uses alongside is important as it is in these areas that higher scale development, more people and activities will be concentrated. These corridors will also be the areas where higher levels of economic activity will occur.

Safety and security
Safety and security as a planning principle involves both technical and social aspects of development. It not only addresses violence, crime, fear of crime and vulnerability, but also traffic and occupational accidents.

Sustainable communities planning aims to create an environment in which inhabitants can move freely without fear of crime and where pedestrians are given priority.

An urban structure based on mixed development and higher densities in combination with design based on surveillance and social control contributes to safety and security. Attention to the convenience and safety along prioritised pedestrian routes is important. Creating character and identity, promoting a sense of togetherness and encouraging community cooperation also improve security in urban areas. Housing associations, street committees and tenants associations can play a vital role in promoting safety and security.

Traffic safety and prevention of accidents at work places require good design, regulations and effective enforcement.

Variation and flexibility
Variation and flexibility involve urban design aspects in the form of different types of housing, heights, densities and land uses, and provision for different land tenure options within a community area. Furthermore the principle allows for changes over time to accommodate growing or shrinking households and alternative economic activities.
The aim is to create attractive, diverse, pleasant and well-functioning urban areas that can accommodate different socio-economic groups and the need for a variety of household types.

To achieve variation, different solutions and flexibility in terms of land use rights are necessary. Phasing of development and reduction of the size of development projects allows for different designs and thereby creates character and identity.

**Densification**

Densification creates more compact structures that improve access to work, services and public transport. It also provides for a more efficient use of infrastructure.

Densification will be achieved through reduced erf-size, alternative housing types and mixed development. Within existing areas densification will include infilling and redesign.

There is a need to promote awareness of the costs of low densities and the benefits of lower development and service costs in more compact urban environments.

**Reducing urban sprawl**

Limiting urban sprawl is closely linked to densification and creation of compact urban structures. It is therefore an important aspect of integration and sustainability and crucial for efficient infrastructure provision.

The other aspect of this spatial principle is the protection of farming land and the possibility of providing agricultural products to the urban areas from the immediate surroundings. Enabling local agricultural production is important from a sustainability perspective.

The establishment of the urban edge, which limits the growth of the urban area, was part the SDF planning process. The main purpose of the urban edge is to control urban sprawl and to avoid intrusion of urban activities into agricultural land and natural environmental areas.

The encouragement of agricultural production outside the urban edge is part of the sustainable communities planning approach. Viable local agricultural production will in turn depend on efficient market facilities.

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**Assessing the suitability of land for low-income housing**

The CSIR (Council for Scientific and Industrial Research) has developed and applied a sustainable housing locality cost-benefit assessment model in eight subsidized housing locations (Alexandra and Diepsloot in Johannesburg, and six localities in Ethekwini, KwaZulu-Natal). The model aims to test the assumption that peripheral localities are more costly and less beneficial in terms of transportation costs, accessibility to employment opportunities and greater energy consumption and greenhouse gas emissions.

The model has been developed to guide decision-makers to direct low-income housing delivery to localities which are least costly to develop, maintain and operate over the longer term, but which at the same time yield the greatest benefit. The multi-disciplinary model incorporates engineering services, transport, social amenities, retail goods and services, environmental resources, land and housing costs and benefits, including capital and recurrent costs, to both government and households.

This model enables the critical sustainability factor of affordability to be measured, not only for the different spheres of government but also for households, in both the shorter and longer term.

*CSIR Annual Report, 2006*
Central area in a Sustainable Community Unit

- open spaces for recreation
- lower density residential area
- high density residential area
- activity corridor
- community hall
- transport corridor
- business support centre
- open spaces for recreation
- transport corridor
- multi-purpose centre
- crèche
- marketplace
- urban agriculture
- high density residential area
- business support centre
- school
- workplaces
- small industry
- activity corridor
- lower density residential area
- housing cluster
- Central area in a Sustainable Community Unit
Filling the gap

Spatial planning at community area level links and fills the gap between municipal level IDP and SDF planning and detailed neighbourhood and sector planning.
- Desired land use patterns, direction of growth, urban edges, development areas, etc.
- Plan is flexible and can change to reflect priorities
- Guiding policy

- Planning building block to improve accessibility to services and employment opportunities by providing them closer to places of residence and along main transportation routes
- Filling the gap promotes a sustainable and integrated physical and socio-economic structure
- Real public participation in planning is possible at this level

- Layout
- Record of land use and development rights and restrictions applicable to property
- Binding regulations
Comprehensive Plan for Sustainable Human Settlement Development

This policy, known as Breaking New Ground, focuses on responsive and effective housing delivery and the promotion of a non-racial, integrated society through developing sustainable human settlements and quality housing. Objectives are:

- Accelerated housing delivery as a strategy for poverty alleviation
- Housing provision as a strategy for job creation and economic growth
- Property access by all as an asset for wealth creation and empowerment
- Crime reduction, social cohesion and improved quality of life for the poor
- A single residential property market to reduce the duality between the first economy property boom and the second economy slump
- Housing as an instrument to develop sustainable human settlements and support spatial restructuring

Sustainable human settlements are well-managed entities in which economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend, resulting in sustainable development, wealth creation, poverty alleviation and equity.

The Breaking New Ground policy focuses on spatial restructuring through:

- Progressive eradication of informal settlements
- Densification and integration
- Enhanced spatial planning within a broader spatial restructuring framework
- New housing projects on well-located state, para-statal and private land, with funding for land acquisition and other fiscal incentives
- Urban renewal and inner city regeneration through social housing in urban restructuring areas and demand-driven subsidies
- Development of social and economic infrastructure
- Improved housing through alternative housing options, housing design and quality

It also focuses on implementing new housing delivery instruments, inter-governmental cooperation in settlement development, institution and capacity building at various levels, job creation and improved systems for monitoring and evaluation. These areas are detailed in seven Business Plans in the Comprehensive Plan.
Legislation, policies, guidelines and Sector Plans relevant to Sustainable Community Planning

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Department of Constitutional Development
the planning of integrated and sustainable communities needs to take into account physical, social, environmental and economic aspects and goals. The spatial form arises from the planned integration of the built environment and its functional elements into the natural environment.

Spatial planning for existing and new areas has different limitations and possibilities, but both should remedy the distortions of apartheid and post-apartheid township planning, which was characterised by segregation, urban sprawl and low quality dormitory settlements. Given these existing conditions, creating an integrated, compact and sustainable city will take time.

Functional elements
Sustainable communities are living systems, with different functional elements. In planning for sustainable communities these elements will be incorporated and will be reflected in the plan proposals and in the urban development pattern. The main functional elements are:
- Housing
- Work
- Services
- Transport
- Community
- Character and identity

The key development principles of integration and sustainability should guide the planning for each of these elements, and inform both spatial and non-spatial features. The character of a Sustainable Community Unit is determined by overall and neighbourhood layouts, building and housing types and design, accessibility of economic activities and services, community
participation and responsibility, safety and security, cultural identity and environmental care.

**Planning principles**
The sustainable communities planning approach is based on the following thirteen planning principles which apply in general, and to the six elements identified above:

- Poverty alleviation – meeting basic needs
- Focus on special needs groups – HIV/AIDS affected persons, children, the aged and people with disabilities
- Gender equality and equity
- The environment – physical, social, economic
- Participation and democratic processes
- Local economic development
- Accessibility – public transport and pedestrian focus
- Mixed use development
- Corridor development – transport and activity corridors
- Safety and security
- Variation and flexibility
- Densification
- Reducing urban sprawl

Certain principles are of particular importance to particular elements, and these are highlighted in the checklists at the end of the following sections, that show how the principles apply to each element, and the results of their application.

In many cities there are old urban areas containing good examples of characteristics of sustainable development – a variety of activities, mixed development, flexible housing, organised open space for pedestrians, safe paths for cyclists, green areas, parks and safe meeting places.
Nelson Mandela Bay Densification Policy

It is recommended that a collection of urban development strategies aimed at promoting growth that is balanced and fiscally, environmentally, socially and culturally responsible and accepted by all inhabitants. This approach, known as the “smart growth approach”, promotes growth and development in areas with optimal opportunity, and provides a solution to sprawl on the urban periphery.

A holistic approach integrating all facets of growth and development should be adopted. To achieve this, specific principles to guide densification are recommended as follows:

- Densification must contribute to the overall structure and functionality of the metropolitan area in that it takes place in a balanced, focused and structured way.
- Specific areas of opportunity or need for reconstructing should be identified (areas that should not be densified for specific reasons should also be identified).
- Areas targeted for densification should be treated as whole environments.
- Appropriate higher density housing opportunities at appropriate locations must be provided for all income groups.
- Areas targeted for densification should be well served by public transport in future.
- Retain, enhance and encourage cultural assets.
- Preserve and enhance opens space, farmland, natural beauty and critical environmental areas.
- Encourage community and stakeholder collaboration.

There is a definite need to increase residential densities, but on the other hand there is a need to maintain and protect the existing unique urban character and environmentally sensitive, low density areas within the metropolitan boundary. The aim is to find the balance between conservation and urban densification.
Zoning in Nelson Mandela Bay Municipality

Existing zoning schemes in the city were inherited from pre-1994 administrations, and are geographically based. There are currently 12 schemes in different areas, with significantly different land use categories, zones, development parameters, definitions and formats. These schemes are mostly outdated in relation to current developmental challenges, as they were designed to control rather than facilitate development. Being geographically based, they do not provide a consistent and unified basis for land use management.

The Sustainable Communities Concept needs to be complemented by the integration and modernisation of these schemes in a unified Land Use Management System and zoning scheme that:

• Creates clear links between various levels of planning from the SDF to zoning regulations
• Controls development rather than control
• Introduces zoning mechanisms to support the SCU concept
• Supports higher densities and mixed use development
• Allows zoning flexibility to adjust to changing circumstances and developmental and market needs
• Simplifies scheme regulation formats
• Uses the 13 SCU planning principals to formulate new land use and zoning categories and development parameters

The Greenhouse Project

The Greenhouse Project operates from a revamped old potting shed in Joubert Park, Johannesburg. Its focus areas were:

• To provide a working demonstration of sustainable ways to plan, build, landscape, and manage energy, water and material resources;
• To support organisations working to improve the urban environment, particularly community based organisations, and
• To disseminate the information that will enable individuals in all sectors of society to sustainably improve the quality of life in their communities.

Reference Dorah Lebelo at The Greenhouse Project. E-mail: dorahl@ghouse.org.za or www.greenhouse.org.za
**3.1 Housing**

The character and quality of housing is a primary determinant of the quality of the urban living environment. A house meets basic needs, provides the family living context and represents values and aspirations, becoming a home that may accommodate many generations. Providing a home for one’s family is a great personal achievement, a source of self-worth and identity, and the most important investment of a person’s life. The commitment of the SA government to subsidize access to housing acknowledges its importance as a basic human right.

**Housing – integration and sustainability**

Integration and sustainability should inform the sustainable communities approach to housing in terms of qualitative and structural characteristics, layouts and the relationship between different functions, uses, and spaces. These principles apply to green field, upgrade, infill and new projects.

Integration manifests in:
- housing for a variety of socio-economic levels
- housing clusters
- mixed use
- variety of functions and services
- improved relationship between green and built environments
- variety of housing types
- variety of tenure options

Sustainability is realised by:
- housing quality, character and efficiency
- increased densities that improve urban and service efficiency
- eco–housing design – local resource use, types of materials, sanitation systems, energy conservation and renewable sources, and provision for waste minimisation and recycling
- housing clusters that promote social cohesion and local participation, organisation and responsibility
- mixed use housing that supports income generation and financial sustainability
- institutional support and good, cost-effective service provision
- municipal community co-operation in managing and protecting built and natural environments
- flexibility that accommodates growth, alternative household structures and changes over time, and meets the needs of the elderly, disabled and HIV/AIDS affected.

**Increased residential densities**

Sustainable development, efficient use of infrastructure and functional integration require more efficient land use and higher densities, based on new approaches in planning and new attitudes to housing, urban living and design. Existing densities of 20 to 30 units per hectare are too low to achieve efficient use of infrastructure, making services expensive and creating urban sprawl.

Higher densities:
- increase transport efficiency and lower costs
- decrease the need to travel, the time it takes, and resulting pollution
• enhance access to work, facilities and services
• increase access to services and decrease costs
• reduce site development costs

Higher density and a more compact urban structure can be achieved by:
• reduced erf sizes
• flats, 2–3 storey walk-ups, semi-detached, row and housing clusters
• infilling and redesign
• narrower access roads
• shared parking for housing clusters

Higher densities should specifically be encouraged at central nodes and along transport corridors, also in existing areas, together with infilling and redevelopment. Densities in most areas can be doubled without reducing access to open space. 70–100 housing units per hectare can function efficiently; semi-detached housing can achieve 50–60 units/ha, and two-storey townhouses are a space and cost-efficient option.

Higher density housing requires political support and community acceptance, based on awareness of its benefits and the costs of urban sprawl. The urban edge as a boundary that limits urban sprawl is a concept embodied in the Spatial Development Frameworks of most larger South African cities.

### Good Sustainable Community type housing projects in South Africa

**Port Elizabeth**
- Sakhasonke, Walmer
- Missionvale low-cost housing
- Sakhalunthu, Motherwell

**Kimberley**
- Eco Village, Galeshewe
- Hull Street Housing Project

**Johannesburg**
- Elengani social housing
- Brickfields social housing
- Ecovillage – Ivory Park, Midrand

**Cape Town**
- Royal Maitland
- Morgan's Village
- Hanover Park
- Joe Slovo

**Attractive residential areas with higher densities enable efficient use of infrastructure and make services less expensive**

**High density housing promotes efficiency, accessibility and variation**

**Well organised open space**

**Playground in social housing area**

**Semi-detached houses**
CHAPTER 3 – SPATIAL PLANNING

Securing land for early implementation and future needs

Identification of early implementation projects and prioritised land reserves as part of the implementation programme

Incremental development of a house

Core house development to meet basic needs with indications for extension possibilities

Adding rooms to accommodate a growing family

Building a second floor to allow for extended family accommodation, tenants or home-based business on the ground floor

What kind of house is this? he said, where I have come to roam? It’s not a house, said Judas Priest, it’s not a house, it’s a home.

Bob Dylan
in The Ballad of Frankie Lee and Judas Priest
Infilling achieves higher densities, integration and efficient land and infrastructure use. In most cases infilling contributes to an improved urban environment.
Example of new medium density housing in Richmond Hill, NMBM.
Housing clusters

Housing clusters of between 30 and 50 units should be the primary structural unit, with:

- location around a common open space or along short streets
- a sequence of private, semi-private and public open spaces
- playgrounds and crèches
- shaded meeting places, communal gardens or allotments
- access by car, or with a common parking area
- a primary movement network of pedestrian walkways and cycle paths
- layouts enabling surveillance of open spaces, pedestrian paths and access points
- different size units to accommodate different housing needs
- the possibility of extensions and complementary buildings for home-based economic activities and changing household needs

The size of clusters should be limited to avoid monotony and to facilitate a sense of togetherness with one’s immediate community of neighbours.
Neighbourhoods
Functional and social integration should occur at neighbourhood level, with access to services, employment areas, commercial centres, public transport and recreational facilities. There should be a variety of housing types and densities, and pedestrian walkways and cycle paths connecting housing clusters with service centres, employment areas and public transport nodes.

Housing and the environment
Sustainable housing has implications for design, choice of material, energy supply and conservation, sanitation, and local economic development. Provision for alternative energy production, water supply efficiency, local sanitation systems and alternative infrastructure systems should be considered in initial planning, also to allow for future choices. Sustainability is promoted by locating new development areas in order to protect environmentally sensitive areas, and to provide sufficient, appropriately designed common open space.

Local Agenda 21 encourages municipalities and communities to prioritise environmental sustainability, and sustainable community planning promotes this at the design stage, as a basis for ongoing environmental responsibility (see page 22).

Mixed development
Mixed development or functional integration involves integrating living, working, trading, service and recreational functions and facilities in local areas. Complementary functions increase accessibility, availability and variety, and reduce transport needs. Examples are:

- combined residential and business/trading units e.g. ground floor shop/workshop with upstairs accommodation
- social and community services in commercial centres and corridors
- small business activities in housing areas
- urban agriculture in backyards and larger common areas
- market places and shops in residential areas
- mixed uses within clusters and neighbourhood units
- special areas for mixed development near commercial centres, public transport nodes and along activity corridors
- use of schools as social and cultural centres for community meetings, adult education, recreation, sport and entertainment
- co-location and resource sharing among community services e.g. ward offices, housing and business support centres and municipal offices

GLOSSARY

environmental sustainability
the ability of an environment and its key natural processes to continue to function in a healthy manner

monotony
boring repetition

Local Agenda 21
The United Nations international local governments programme for environmental sustainability in the 21st century

glossary

energy conservation
using less energy

recreation
non-work activities that are healthy and regenerating
Affordable high density housing competition, NMBM 2004

An architectural competition was held in 2004 in which South African and Swedish architects were challenged to submit proposals for innovative higher density housing designs for the subsidised sector in urban areas. One of the objectives was to actually build the winning proposals. In a first phase, 10 show houses were built in Motherwell, township approximately 20 km from Port Elizabeth. There are eight South African designed units and two Swedish designed units including single and double storey, semi-detached and row houses. Some of the visionary new designs are being used at Sakhuluntu village in Motherwell. Pictures show the crèche, two of the winning houses and the models from the competition.
Housing diversity
Mixed housing types promote socio-economic, cultural and ethnic integration via co-operation and interaction between different groups, both formally and informally at schools, recreation facilities, shopping areas, and work places. Different housing types and designs cater for different preferences and means, and enhance neighbourhood variety and character, as do self-built housing and extensions.

Tenure and financing options
Different tenure options should be available to meet different needs:
• individual title
• communal or sectional title ownership
• rental

Social housing includes a range of rental options that is supported by government policy in SA. Financing options for owned housing include:
• subsidy or grant funded
• subsidy plus own contributions or loan financing
• loan financed
• self-financed

Variation and flexibility
Mixed development and different housing types enhance the environment by creating variation and flexibility, which provide residents with a wider range of choices and opportunities. For subsidy houses, extensions and second dwellings on-site enable incremental development and interesting re-design possibilities, in response to growth and changes in families and increased financial means. Flexibility in zoning enables mixed uses, change of use and sub-divisions. Physical and socio-economic diversity enable flexibility and growth, as community and household needs and standards of living develop.

Urban planning should result in attractive, pleasant and functional built environments characterised by:
• variety, and variation over time as communities develop
• a mix of land uses
• layouts designed primarily for walking and cycling
• communal meeting places
• vegetation and greening
• well maintained, attractive public open spaces
• good quality housing clusters

Improving the quality of life in the built environment in new and existing areas can be achieved through variations in house types, heights, densities, tenure options and mixed development. Housing diversity promotes physical, functional and socio-economic integration, economic development and sustainability through local economic opportunities, more interaction between different groups and more efficient use of resources.

Social Housing
Social Housing is affordable, medium to high density housing for rental, instalment sale or co-operative ownership that is managed by an institution. SA National Housing Policy provides a regulatory framework, funding, and institutional and capacity building support for six social housing options:
• Social Housing – medium and high density rental accommodation
• Rental Housing – small formal private and backyard rental options with minimum norms and standards in existing as well as green field areas. Home improvement grants are available.
• State Owned Rental Housing – management of Provincial or Local Government rental stock. Transfer of this stock to Social Housing Institutions is promoted.
• Hostels – upgrading or conversion of public sector hostels for rental purposes
• Transitional Housing – rooms for short term rental (max. 24 months)
• Communal Housing – co-operative rental housing for special residents/special needs groups. It includes provision of rooms for rental with communal facilities.

Variation in social housing blocks, Brickfields, Johannesburg
Compare poor examples in the red frames with the others. Good quality, dynamic urban environment are created through variation and flexibility. Functional and social integration are supported by mixed development and economic activities.
Box contrasting bad and good urban situations, side by side with illustrations or photos

- **Monotonous and unattractive**
- Limited mix of land uses
- Repetitive, square grid road structures
- Designed primarily for vehicles
- Lack of communal meeting places
- Lack of vegetation and greening
- Poorly maintained, littered public open spaces
- Poor quality, standardised stand alone RDP houses

OR

- **Varied and attractive**
- Mix of land uses
- Interesting and varied layouts
- Designed primarily for walking and cycling
- Communal meeting places
- Vegetation and greening
- Well maintained, attractive public open spaces
- Good quality, varied and attractive housing clusters
Neighbourhood safety and security
Improved safety and security in community areas and neighbourhoods is a key concern for urban planning. Mixed development and higher densities facilitate surveillance and mutual support among neighbours, tenant associations, street committees and neighbourhood watches. Layouts should avoid:

- isolated housing and recreation areas
- narrow passages
- concealed corners
- dark under-passages and tunnels
- areas not accessible to surveillance

Mixed development contributes to safety and security, as areas are inhabited throughout the day, while residences in commercial areas and activity corridors means these areas are not deserted after working hours.

Traffic safety and accident prevention are an essential aspect of social safety, and should influence road design, traffic systems and control, and provision for pedestrians and cyclists. The design of housing areas, commercial centres and movement routes should have the safety of people in the traffic environment as a key objective (see transport section).

Children, women, the elderly and disabled are more vulnerable to crime and accidents, and planning should assess and provide for safety and security needs, particularly of vulnerable groups.

Housing and disadvantaged groups
It is important to consider and support disadvantaged groups that have difficulty in acquiring adequate housing. The poor need:

- self-help housing processes and phased construction options
- assistance to access subsidies
- special institutions and arrangements for loans and repayment of loans
- subsidised or partly free basic services
- assistance with establishing housing co-operatives and associations

In addition, particular disadvantaged groups such as the disabled need:

- access to appropriate housing
- housing designs that can be adapted to the needs and care of the disabled
- ramp access to public and other buildings and sidewalks

A particular concern is the impact of HIV/AIDS on housing needs. A community area plan should provide for affected households by enabling additional buildings or extensions, and designs that enable home-based care, the care of orphans in extended families and linked household configurations to support child-headed households.
Design for the disabled

There are almost 2 million disabled people in South Africa, many of whom are poor and lack adequate housing. The disabled require design or adaptation of the built environment and housing to enable access and facilitate everyday activities. Key design considerations for disabled people are:

- Access to sidewalks, buildings and rooms in buildings via ramps and ground floor location of essential facilities (if no lifts)
- Pedestrian crossings (with audible signals for the blind if at traffic lights)
- Household design for access and manoeuvrability (e.g. width of doorways)
- Reachable surfaces, door handles, taps and switches
- Lower window heights
- Appropriate toilet, bath and shower design (access, space, handrails etc.)

People with any form of disability benefit from safe and secure local environments with low speed traffic, as well as provision for walking and cycling and quality open spaces.

For details on designing housing for the disabled, see *Open the door for the disabled – Adapting low cost housing for the physically disabled*, a Pelip Housing Company booklet, funded by Sida.
HIV/AIDS and Spatial Planning

‘Spatial Planning, Land Development and Land Use Management in the Context of HIV and AIDS,’ prepared for the SA Cities Network by Development Works is a useful document that deals with:

- the life cycle of HIV/AIDS
- the impacts of spatial and structural factors on HIV/AIDS
- the impacts of HIV/AIDS on land and spatial development
- the burden of extra AIDS mortality on land, and possible responses
- HIV/AIDS and the institutional capacity of local government
- recommendations to address the situation

For the full report see www.sacities.net – go to ‘Special focus on HIV/AIDS’


HIV/AIDS and the built environment

Kevin Bingham, School of Architecture, University of Natal has researched the impact of HIV/AIDS and its implications for the built environment. His paper ‘The impact of HIV/AIDS on building types in selected areas of the KwaZulu-Natal, South Africa’ deals with:

- the epidemic profile and its spread
- the nature of the problem and its impacts
- time frames of the impact on the population
- numbers

The paper looks at the impact of the epidemic in both urban and rural contexts and at specific building types affected. These include housing, health facilities, children’s homes, street shelters, mortuaries, funeral parlours and crematoria, hazardous waste disposal units and buildings for education.

AIDS brief for Architects

‘AIDS brief for professionals – Architects’ by Kevin Bingham and Rodney Harber, School of Architecture, University of Natal (funded by USAID) is a useful pamphlet on AIDS and designing different types of buildings.

Summary

Architects, together with their associated members in the Design Team, are increasingly being faced with the realities and complexities of HIV/AIDS, and its impact on the built environment. The needs of the past will not necessarily be the needs of the future and AIDS will make its mark on the profession. Architects must endeavour to:

- Attain sufficient training and education on matters relating to the provision for those with HIV/AIDS
- Creatively consider new methods of improving the accessibility to and comfort within their architecture, suited to the needs of people living with HIV/AIDS
- Transform their Client’s attitudes to make allowance and provision for the adaptability of their buildings to suit the needs of people living with HIV/AIDS. This should include easy adaptation for future redesign and reuse.

Checklist

✔ Am I contributing to the spread of HIV/AIDS by designing vulnerable building types e.g. single sex hostels, casinos, barracks and workers’ camps on remote sites?
✔ Can my design present opportunities for the prevention of HIV/AIDS, e.g. murals, counselling facilities, or user-friendly spaces for affected persons?
✔ Does my housing design support the potential for home-based nursing for infected persons or mutual help for supervising orphans?
✔ Is the design flexible enough to accommodate evolving changes of use?

Reference: HIVNET
Current Housing Delivery Terminology

**GAP Housing**
The GAP market – people earning R3 500 to R10 000 (household income) per month. They do not qualify for state housing subsidies, but don’t earn enough to participate in the competitive property market, which has escalated dramatically over the last five years.

**Affordable Housing**
Affordable Housing refers to housing for people earning between R1 500 and R7 500 (household) per month who will qualify for a subsidy deposit from government, about 50% of a required deposit.

**Inclusionary Housing**
The policy framework for inclusionary housing is still under development, but aims to get private housing delivery initiatives in the middle/higher income groups to include affordable housing opportunities, in order to achieve a better socio-economic balance and to contribute to the supply of affordable housing.

**Bonded Housing**
Housing developed by means of a bond granted by a financial institution, usually associated with private sector/open market housing.

**Subsidised Housing**
Housing opportunities where the cost is fully or partly subsidised. In the current SA context this typically refers to the Government Subsidy Scheme, but it could also apply to other Housing Subsidy Instruments such as those of some major corporate institutions.

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**Housing Subsidy Instruments**
The following housing subsidy instruments are currently provided by the SA Government:

- **Individual Subsidy** – enables qualifying beneficiaries to obtain a site plus a basic house
- **Consolidation Subsidy** – enables qualifying beneficiaries to build a house on their own site
- **Project Linked Subsidy** – enables qualifying beneficiaries to obtain a complete residential unit in an approved project
- **Institutional Subsidy** – for institutions to enable them to develop affordable housing
- **Rural Subsidies** – for housing for beneficiaries on land belonging to the State and/or governed by traditional authorities. The subsidies are only available on a project basis.
- **People’s Housing Process** – supports households who wish to enhance their housing subsidies by building or organising the building of their homes themselves.

For details on each subsidy type, see National Department of Housing – http://www.housing.gov.za

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**What is a Housing Subsidy?**
A Government Housing Subsidy is a grant provided by the Government to qualifying beneficiaries for housing purposes. The grant is only used for the acquisition of housing goods and services for the provision of complete houses that comply with the minimum technical and environmental norms and standards.
## HOUSING checklist

How do planning principles apply to housing?

<table>
<thead>
<tr>
<th>Principles</th>
<th>Applications</th>
<th>Results</th>
</tr>
</thead>
</table>
| Poverty alleviation – meeting basic needs                    | • Appropriate standards for water, sanitation, roads & stormwater and housing  
  • Space for home-based economic opportunities  
  • Self-built housing and local labour | • Improved living standards  
  • Service availability  
  • Increased household income  
  • Skills transfer |
| Focus on special needs groups – HIV/AIDS affected persons, children, the aged and people with disabilities | • House design and flexibility to enable home-based care  
  • Improved care and support | • Increased access  
  • Integration and acceptance in community  
  • Lower costs of care |
| Gender equality                                              | • House designs facilitate household work  
  • Layouts enable surveillance | • Time and effort saved  
  • Improved safety and security |
| The natural physical/green environment                      | • Ecological materials  
  • Waste minimisation, waste collection and recycling  
  • Greening  
  • Wind orientation offers opportunities for wind turbines and renewable energy source  
  • Solar heating | • A more attractive and healthy environment  
  • Lower costs |
| Participation and democratic processes                       | • Consultation and input in designs and types of housing  
  • Involvement in building and maintenance | • Meeting needs and priorities  
  • Sense of ownership and responsibility  
  • Work opportunities |
| Local economic development                                   | • Home and cluster based work and trading spaces | • Increased local economic activity, incomes, spending, circulation of money, and community wealth |
| Accessibility – public transport and pedestrians             | • Mixed use and proximity to services | • Reduced traffic and transport costs and increased accessibility |
| Mixed-use development                                        | • Houses include workspaces, and shop fronts  
  • Allow extensions and additions | • Local economic development  
  • Transport reduction |
| Corridor development                                         | • Mixed use, higher density housing | • Improved accessibility  
  • Local economic development |
| Safety and security                                          | • Design for surveillance and security | • Decreased crime |
| Variation and flexibility                                    | • Housing types  
  • Tenure types | • Greater choice and appropriateness of housing |
| Densification                                                | • Clustering of houses, smaller erven, and communal open spaces | • Lower service costs  
  • Increased access to services |
| Reducing urban sprawl                                        | • Clustering of houses and higher densities | • Improved access to services  
  • Improved access to public transport  
  • Reduced infrastructure costs |
3.2 Work

The planning of Sustainable Community Units should support local economic development (LED) in spatial and functional terms. Mixed use opportunities promote local work, trading, income generation and circulation of money, which enhance economic and social integration and sustainability.

Work can be integrated by providing opportunities in local industrial areas, commercial corridors and nodes, public spaces, market places and homes. Work includes essential processes such as producing, trading and consuming goods and services, whilst maintaining the built and green environment. Work is the primary, though not the only means of obtaining income with which to meet needs, and is thus the key means to economic sustainability.

Types of economic activity with specific requirements and characteristics are:

- home-based economic activities
- employed work – formal employment
- urban agriculture, local livelihood and food security
- informal economic activities
- formal businesses
- self-employment
- work in public works programmes
- non-profit sector work and service provision
- local economic development support

Home-based economic activity

Home-based economic activities cover a wide range of work that may be income generating or voluntary. They include professional and artisan services, but also household work, child care and domestic service. It is important that plans and land use management regulations facilitate such activities. Basic requirements are:

- good household, cluster and neighbourhood design
- accessibility of goods and services
- child care and safety
- co-operation and mutual support
- a quality local environment
Employment
Most poor people prefer employment with a regular income, and are prepared to travel great distances to jobs, largely by taxi and public transport, at significant cost. Supportive measures include:
- reduced travelling distances
- cost-effective public transport
- adjacent industrial areas accessible on foot or by bicycle
- local job opportunities via mixed development and mixed income areas
- local activity corridors and commercial centres
- local markets and low-cost trading spaces
- units and centres for economic activities.
- home-based small businesses

Informal economic activities
Informal businesses are an important source of livelihood income and the starting point for formal businesses. The informal sector is often the entry point to more entrepreneurial initiatives and should therefore be valued as a ‘breeding ground’ for formal businesses. Spatial planning should take into account and provide space and services for the informal sector which is supported by:
- mixed development enabling activities in homes, yards, and second buildings
- flexible zoning regulations (but not allowing disturbing or polluting activities)
- easy local access to customers via street stalls and marketplaces
- business support centres

Activity corridor – high density mixed use development, work and housing can be combined

Inventive use of containers for informal businesses brings goods and services closer to housing areas

Glossary
informal economic activity
any activity of production, trading or service provision done informally
Social housing in Brickfields, Johannesburg includes space for small businesses on ground floor level facing the street. The work opportunities and services add to the attractiveness of the area.

Flexible regulations and enabling land use management are important to promote informal and small scale businesses.
Local economic development (LED) projects
Public sector and non-profit projects generate part and full-time employment and incomes. Municipal and community partnerships can provide local services and create local jobs and part-time work. Removing refuse, cleaning streets, and developing and maintaining parks and public open spaces are examples. Government and non-government funding can be accessed for such initiatives. Promotion of public-private and community based partnerships can provide work and employment as well as facilitate service provision and maintenance.

Local Economic Development
Local Government is not directly responsible for creating jobs. Rather it is responsible for taking active steps to ensure that the overall economic and social conditions of the locality are conducive to the creation of employment opportunities. This includes:
- addressing market failure
- strengthening competitiveness of local firms
- removing bureaucratic obstacles for local firms
- creating a unique advantage for the locality and its firms

Principles of sound LED
- pursue demand and opportunity driven approach
- start with low-cost activities
- use what is there – don’t build parallel structures
- pursue bottom-up approaches
- build trust, collaboration and synergies
- empowerment through training, on-the-job learning and coaching
- take ownership and responsibility

The Expanded Public Works Programme
The Expanded Public Works Programme (EPWP) is a five year national government initiative aimed at drawing one million unemployed South Africans into productive work in a manner that will enable them to gain skills and increase their capacity to earn income. The initiative is being implemented through established government structures and within existing budgets. The implementation of the EPWP is being co-ordinated by the Department of Public Works (DPW), which has established a dedicated EPWP Unit. The EPWP is being implemented in four sectors – Infrastructure, Social, Economic and Environmental, and specific government departments have been designated to drive the EPWP in each sector. However, implementation of the EPWP depends largely on municipalities.

GLOSSARY
land use management system (LUMS)
- a working document that governs development in an area

public-private partnership
- formal co-operation between government and business

coaching
- helping people improve their performance by facilitating reviewing, evaluating and planning, and by giving feedback and advice
Urban agriculture
The provision of food security is closely linked to the house and its immediate surroundings. Spatial planning must incorporate small scale, family based on-site urban agriculture, which will allow for food production to complement the household meals or income through sale at market places. Food security should be supported by:
- planned spaces for local urban agriculture at household and neighbourhood levels
- local market places where surpluses can be sold to generate income
- allotment, communal and school-based food gardens
- support with management, resources and training

Well-managed community vegetable gardens can create part-time jobs and incomes. Environmentally sound practices such as organic gardening, composting of local organic waste (a key strategy for waste minimisation), and use of grey wastewater are desirable.

Urban agriculture sites should be an important component in the spatial structure. Schools offer sizeable and under-used sites for community gardens, which can also be used for environmental education of learners. Street and open space greening is essential to enhance the quality of urban environments, and provide an opportunity for income generation via municipal community partnerships.

Entrepreneur development
Local economic development depends on local businesses, trade and services developing to meet needs and generate local income and employment. Informal businesses should be supported to develop into established enterprises that are able to remain in community areas. As they grow, they can move from being home-based, to local commercial premises in centres, along corridors or in small-scale industrial parks. The non-spatial aspects that include training, marketing support and financial support should be available in the community areas and would be located in the Local Commercial and Social Service Centres or at special Local Business Support Centres. Entrepreneur development requires support in terms of:
- spaces to operate
- local marketing opportunities and sites
- local services
- training, marketing and financial support
- coaching and mentoring

GLOSSARY
entrepreneur
someone who starts and runs a business
entrepreneur development
training and support for entrepreneurs
food security
having enough food on a sustained basis
organic gardening
gardening using only natural compost and substances to increase soil fertility and control pests, diseases and weeds
mentor, coach
someone with experience who helps others to succeed
mentoring
guiding the development of another
Convenient access to markets is crucial for small business and urban agriculture.

Areas for urban agriculture should be established in consultation with the communities to ensure commitment.

Vegetable field project in Bloemendal, Port Elizabeth

Housing block at Hull Street, Kimberley with internal area for urban agriculture
Galeshewe Urban Renewal Programme and its Open Space and Landscaping Plan

The importance of water as a source of life can never be over-emphasised, and managing water as a scarce resource is necessary for all kinds of development in our municipalities. We need to invest in water conservation and make the best use of water, for example by re-using treated effluent water from wastewater treatment plants.

In May 2005, four new, quality play parks were opened, as part of the Galeshewe Urban Renewal Programme (GURP) and its Open Space and Landscaping Plan. Stakeholders include DHLG, Sol Plaatje Municipality, the Expanded Public Works Programme (EPWP) and local communities, who played a crucial role in identifying the land and planning the parks. Mazzoncini and Marais Horticultural Services was appointed as the implementing agency.

The new parks will be irrigated using treated wastewater. This project demonstrates the importance of water for improving peoples’ living environment, and creates new jobs through co-operation between public, private and community sectors.

This project creates new jobs through co-operation between public, private and community sectors.

Besides developing parks and playgrounds, the Urban Renewal Programme also includes major rehabilitation of stormwater drainage. All workers, both men and women, were trained to use maintenance equipment. Workers themselves determine who should work with what equipment, and they take turns to develop their skills.
An emerging contractor’s story

In 1998, Jesse Chikane started out with virtually nothing but the aim of becoming a successful building contractor. What got her going was being awarded a contract by the Department of Housing to build ten low cost houses. Before becoming a contractor on the Hull Street project in 2001, she had already employed 12 people, of whom 2 were qualified artisans. Today her company, RJC Construction employs 32 people full-time, including six artisans, plus an average of 27 casual workers. RJC owns a three-ton truck, bakkie and microbus, plus building equipment, and has no debt.

Working on the Hull Street project has helped RJC access training and develop their construction quality to meet the standards of the National Home Builders Registration Council (NHBRC). Jesse has developed a good working relationship with the municipality and Housing Company, and found their purchasing of materials particularly helpful in terms of obtaining credit and good prices for bulk orders.

Jesse is currently busy with two other contracts besides units at Hull Street: renovation of a school, and building facilities at a cricket stadium. Her aim is to grow her company over the next five years to employ about 100 people.

Jesse’s tips for entrepreneurs

• believe you can do the impossible
• take the lead, even if conditions are harsh
• treat your staff as family
• make decisions together with staff
• be open with staff
• don’t be selfish
• be ahead – plan today for tomorrow
• be careful with money – don’t spend unnecessarily
• get tough with staff when necessary – the business carries the staff and the staff carry the business
## WORK checklist

How do planning principles apply to work?

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• Space for home-based economic opportunities  
• Self-built housing and local labour | • Investment and funding  
• Opportunities for work  
• Less crime |
| **Focus on special needs groups – HIV/AIDS affected persons, children, the aged and people with disabilities** | • House design and flexibility to enable home-based care  
• Improved care and support | • Opportunities for care giving |
| **Gender equality** | • House designs facilitate household work  
• Layouts enable surveillance | • Recognition of the value of unpaid work by women  
• Support for home-based income generation |
| **The natural – physical/green environment** | • Tourist stalls and areas for recycling, cleaning and refuse centres, community based businesses, tree planting projects | • Opportunities for local maintenance, service activities and income generation  
• Enhanced tourism potential  
• Enhanced identity |
| **Participation and democratic processes** | • Public participation towards future work opportunities that may arise.  
• Mobilisation of communities  
• Establishment of local support centres | • Reduced local unemployment |
| **Local economic development** | • Create opportunities for SMMEs and skills development  
• Multi-purpose job creation and business support centres | • Opportunities for work  
• More self-employment |
| **Accessibility – public transport and pedestrians** | • Work provided within walking distances and along public transport routes | • Mobility and accessibility to and from work and home |
| **Mixed-use development** | • Combine uses such as housing, business, community, recreation, education and work | • Local Economic Development  
• Money stays in area increasing local buying power |
| **Corridor development** | • Provide public transport  
• Promote higher levels of economic development along corridors | • Viable public transport  
• Improved accessibility to work/employment |
| **Safety and security** | • Establish Community Policing Forums  
• Locate works places close to places of residence and along main routes  
• Promote varied activities on streets | • Reduced health, insurance, policing and correctional services costs  
• Enhanced investment, mixed income levels and tourism potential |
| **Variation and flexibility** | • Different informal and formal work opportunities | • Reduced crime, integration of 1st and 2nd economies |
| **Densification** | • Promote work opportunities along corridors and in multi-purposes centres | • Threshold population that supports local economic activity |
| **Reducing urban sprawl** | • Economic/work opportunities provided within close walking distances and along public transport inside the urban edge | • Work closer to home  
• Economic injections  
• Reduction in transport costs |
REFERENCES

Successful LED Projects in the Northern Cape (including guidelines for LED) available from MTI, Municipal Training and Development Institute, Kimberley 053-830 6320
www.solplaatje.org.za
e-mail: mvzyl@solplaatje.org.za
3.3 Services

The availability and quality of services is a key determinant of the quality of life. Provision needs to be planned for essential services such as:

- water and sanitation
- waste removal
- environmental care
- electricity
- telephones
- health services
- educational/cultural services
- policing
- social and welfare services
- commercial services
- roads and stormwater drainage

Services, integration and sustainability

Good quality local services promote social integration by addressing disparities in service levels which in turn promotes mixed income levels, with resultant economic benefits. Local access to public and other services is also a key aspect of functional integration. Social and economic sustainability are enhanced by accessible services which enhance opportunities and reduce costs. Physical integration of services and sharing of facilities contributes to their financial sustainability, while reducing the need to travel to access services contributes to environmental and economic sustainability.

Distances to facilities

Sustainable Community Planning is based on the household perspective. The focus is put on availability and accessibility of work, services and recreation within walking distance.

GLOSSARY

disparities
differences causing inequalities
Planning for basic services
Basic services should be provided from the start to all households at a uniform standard, while other services can be developed over time. Provision should be made for this in planning, based on distances and numbers of households per service. Some services require infrastructure and facilities that must be planned at the start, with involvement of relevant providers, for example, of bulk supplies of water and electricity. Planning, budgeting for and financing of service infrastructure requires technical and financial expertise and inter-departmental or agency collaboration.

Engineering and financial considerations in structural framework plans, particularly for low income areas, need to be guided by sustainable community principles and a vision for the area generated by planners and other stakeholders. Integrated development planning by all stakeholders co-operating in multi-disciplinary teams is needed to plan appropriate service provision that considers qualitative as well as quantitative aspects.

Planning for water supply and sanitation needs to be based on agreement of appropriate systems and standards, taking into account environmental, social, technical, financial and maintenance considerations. An appropriate sanitation system for all households depends on access to sewage networks, local soil conditions and acceptability of alternative sanitation solutions. In areas without bulk infrastructure, dry systems, composting methods and local infiltration may be appropriate and cost-effective. Alternative solutions should be assessed in terms of environmental, social and health impacts, and beneficiaries need to be involved in such decisions.

Waterborne sanitation systems can be constructed to operate in more environmentally friendly and efficient ways, to conserve water, and reuse grey water at household and cluster levels.
Talking SENSE

The Sustainable Energy Society of Namibia (SENSE) is an information network that promotes sustainable energy (solar, wind and bio-fuels) by raising awareness and lobbying government.

SENSE was established in 2005 and has more than 130 member organisations such as HRDC (Habitat Research and Development Centre), Desert Research Foundation (DRFN), Namibian Renewable Energy Programme (NAMREP) and the Renewable Energy and Energy Efficiency Bureau (R3E). Members include home-owners, eco-activists, professional consultants, suppliers, teachers and NGO’s.

SENSE’s work includes hosting public events on renewable energy issues and printing and distributing pamphlets and brochures. Topics include basic principles of solar heating, renewable energy sources and household energy efficiency.

Initiatives of SENSE members include:
- The Solar Revolving Fund assists low-income earners with low-interest loans to install solar water heaters.
- BEN (Bicycle Empowerment Namibia) imports, repairs and sells second-hand bicycles at low cost to poor people. They encourage municipalities to install cycle paths to make cycling safer.
- Solar Age is currently investigating the possibilities of a solar-diesel hybrid system for the Tsumkwe settlement.


Basic Service Infrastructure

Municipalities must ensure that their citizens have at least the basic level of the following essential services
- Water supply
- Sanitation
- Roads and stormwater drainage
- Solid waste disposal
- Electricity

Municipalities can get Municipal Infrastructure Grant (MIG) capital funding for infrastructure.

Options for technical services

Water supply options
- Communal standpipes
- Yard taps
- Yard tanks
- Roof tanks
- House connections

Sanitation options
- Ventilated Improved Pit Latrine (VIP)
- Ecological Sanitation – dry systems
- Low flow on site systems
- Septic tanks
- Water-borne sanitation

Roads and Stormwater options
- Access to erf with gravel road; earth ditch
- Narrow paved road; earth or concrete lined ditch
- Paved streets with kerbs; earth, concrete lined ditch or pipes

For further information, see “The Municipal Infrastructure Grant; Basic Level of Services and Unit Costs: A guide for municipalities”, DPLG 2005

VIP is a low cost type of sanitation

Maintenance of stormwater drainage is important for the protection of roads
Electricity and telephones

Electricity is the optimal source of power due to its varied uses, but requires a network of power lines. Electricity provision is expensive, and cost recovery is facilitated by pre-paid meters. Electricity generation, mostly from coal in SA, is highly polluting, and sustainable community planning should aim for local renewable energy production from solar, wind and bio-gas sources, as environmentally beneficial and sustainable alternatives. This may influence the design and the capacity required for the power supply and should therefore be considered at an early stage of the planning process. Electricity saving is possible, particularly via solar water heating.

Electricity is needed in homes, and business and industrial areas require a high standard power supply. The network should be designed so that all households, premises and street lights are a reasonable distance from a connection point.

Telephones
Access to public telephones is essential in poor communities for safety and security and in emergencies and there should be a public phone within 500 metres of household.

Sustainable Energy
Oil, coal and gas are non-renewable and rapidly depleting energy sources that are the major cause of carbon dioxide (CO₂) emissions, global warming and climate change – the number one environmental threat. In SA most of our electricity is coal generated, and we are the 13th largest polluter globally. Sustainable Communities need to conserve energy and shift to renewable, non-polluting energy sources such as solar and wind.

Carbon Trading – getting paid to do the right thing!
The Clean Development Mechanism (CDM) is a United Nations mechanism set up to reduce CO₂ emissions. It allocates carbon pollution limits to countries on the basis of population, and enables developing countries which use less than their allocation to sell their carbon credits to developed countries that use more than their allocation, and have a CO₂ debit. The Department of Minerals and Energy approves CDM projects in SA, which enables them to seek funding partners via the CDM.

The Kuyasa Low-income Urban Housing Energy Upgrade Project
This City of Cape Town project in Khayelitsha provides solar water heaters, ceiling insulation and low-energy light bulbs to reduce electricity consumption and costs. It is the first CDM supported project in Africa, and is to be scaled up from the pilot of 10, to 2 300 houses. The project is 20 to 30% funded by the UK Department of Environment via the CDM, and by Department of Environmental Affairs and Tourism poverty alleviation funding.
**Global Warming, clean energy and energy conservation**

Global Warming due to carbon dioxide emissions from burning of fossil fuels is likely to create a worldwide environmental crisis. Currently the bulk of cheap electricity in SA is generated by burning coal, producing significant CO$_2$ emissions.

South Africa thus needs to increase generation of sustainable energy from clean, renewable sources such as sun and wind, and the Government White Paper on Renewable Energy sets targets for the future contribution of renewable energy.

One solution can easily be implemented – heating water with solar power rather than electricity. Solar water heating is effective for households, commercial complexes and industry, and capital costs can be recovered from reduced electricity use well within the lifespan of systems. The technology is well developed and many products are already on the market. Increased local production of solar systems will also contribute to job creation and economic growth.

Another practical and low cost solution is energy conservation by using less energy for:
- heating and cooling of buildings (see box on good thermal design)
- minimizing motorised travel and transport
- low energy appliances and lighting

Everyone needs to become energy conscious and save on energy use, which will reduce personal and environmental costs, and the huge capital costs of additional generation capacity in the case of electricity.

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**Renewable energy initiatives in Nelson Mandela Bay**

The Nelson Mandela Bay Municipality has, in line with the Energy White Paper and the Renewable Energy White Paper, embarked on a process to implement renewable energy technologies. Tenders invited national and international parties to submit proposals for the following renewable energy projects:

- **Solar water heating (SWH) project** – to install 100 000 SWH units over a six year period, with more than 60% for indigent and low-income households.
- **Wind energy** – to generate electricity from small and large wind turbines. A 15 megawatt wind farm is envisaged initially. Micro wind turbines for domestic households are also being considered.
- **Waste incineration and bio-digestion plant** – will convert effluent to a sludge which can be dried and burned, to drive an electrical generator. De-activated sludge could also be used for making bricks or to cap landfill sites.
- **Demand side management (DSM) initiatives** such as street light dimming, promotion and installation of energy saving devices, wastewater treatment plants and improved building efficiency measures.
- **Land fill gas** – the installation of gas collection wells at two major land fill sites has the potential to generate sufficient methane gas to generated 3 to 4.7 MWe per annum, which justifies the cost of the equipment required.

*Source: NMBM – Renewable Energy in a Municipal Context, November 2006*
Checklist for Thermal Efficiency in Housing

Thermally efficient houses reduce energy use and financial and environmental costs. Better designs have huge impacts over the long-term (50+ years) occupation of houses.

✓ Site layout
  • Site layout with long axis in East/West alignment
  • House positions set out in township layout
  • Adjacent houses allow solar access – staggering or sufficient North/South spacing for winter sun
  • Options for house expansion indicated on township layout

This enables optimal orientation of houses (North/North East). Solar access/minimisation shading.

✓ Housing form
  • Multi-storey rather than single storey
  • Row housing rather than detached houses

This enables better thermal performance, higher comfort levels and lower materials and energy costs.

✓ House orientation
  • Long axis of the house oriented essentially North/North East (15° West to 45° East)
  • Cold wind side of the house minimised

This enables optimal solar thermal positioning and minimum wind and rain exposure.

✓ Windows and roof overhangs
  • Windows (taller rather than wider) on four elevations of the house – 5% of floor area on North, 2% on East and 0.5% on South and West
  • Roof overhangs to allow sun through windows in winter, but shade in summer.

This ensures optimal natural lighting, minimises heat losses, enables solar heating in winter and avoids solar heating in summer.

✓ Thermal insulation
  • Ceiling installed to minimise heat gain/loss through the roof
Costs: R75/m² or R2250/30m²

References
Glynn Morris, AGAMA Energy (pty) Ltd.

GLOSSARY
thermal
relating to heat
Waste removal

Service levels are classified as follows
- Basic service – communal collection point
- Full service – kerbside collection

The target is for all households to have kerbside refuse collection. For households to receive an adequate, equitable and affordable waste collection service, the following should be planned in a sustainable community:
- Roads wide enough for refuse trucks
- Culs-de-sac wide enough for trucks to enter and turn
- One easily accessible refuse transfer site per 3000 residential sites, for disposal of garden refuse and bulky waste that does not fit in black bags or wheely bins.
- Recycling at transfer stations via containers for different types of waste
- Education and information on recycling at transfer stations

Waste minimisation

The amount of waste going to landfills should be reduced by
- Minimisation of waste at source
- Waste separation and recycling at source
- Reuse and repair (e.g. via buy-back centres)
- Composting and taking organic waste out of the waste stream
- Green procurement – using products and services that involve minimum waste generation in production and that use eco-friendly, bio-degradable materials

Community education, awareness and responsibility are essential for waste minimisation, and urban agriculture creates local opportunities for composting of organic waste.

Factors to be considered before selecting a specific system
- Social – the needs of the community, e.g. job creation, acceptability
- Political – local policy and statutory requirements
- Financial – available capital, ability of the community to pay
- Technical – waste types generated, availability of suitable equipment
- Environmental – local climate, potential effect on groundwater resources
Who are the experts on waste management in Southern Africa?

The Institute of Waste Management of Southern Africa promotes sound and cost-effective waste management to ensure that all waste is handled in a way that protects the environment. The members come from all sectors of the waste management industry and include waste managers, contractors, academics, consultants and students.

website: www.iwmsa.co.za

When we throw a product away it represents more than just a piece of waste, it also embodies all the resources used to produce it. If you add these up, the real weight of a toothbrush becomes 1.5 kg and that of a cellphone becomes 75 kg.

Margot Wallström
EU Commissioner

Waste should be managed from the point of generation to the point of disposal, through control of the following:

- **Waste avoidance**: Prevent the creation of waste in the first place
- **Waste minimisation**: Reduce! Reduce! Reduce volumes by reusing, sorting and recycling
- **On-site storage**: How and where waste is stored when it is first generated
- **Collection**: How waste is picked up
- **Transport and transfer**: How waste is moved
- **Processing and recovery**: How waste is treated or made useful
- **Disposal**: How waste is finally discarded

**Community Zero Waste Project**

The Community Zero Waste Project in Johannesburg is designed to show how reclamation works, while making people aware of the need for Clean Production. It includes organic gardening and crafts as well as developing understanding of using water and energy efficiently. Project activities are introduced as neighbourhood programmes. The programmes in turn promote environment protection and economic development in the community.

**Useful Zero Waste tips**

- Separate organics from reusables/recyclables
- Start a compost heap for organic waste
- Donate or sell reusables/recyclables
- Use energy-saving compact fluorescent light bulbs
- Use a kettle and not the stove to boil water
- Switch your geyser off during the day
- Use a bowl or buckets to rinse things, rather than running water
- Use a broom not a hose to clean paving
- Water the garden in the afternoon 15:00 or in the morning before 10:00

*Source: Brochure on Community Zero Waste Project by Johannesburg branch of Earthlife Africa*

**GLOSSARY**

**clean production**

the production of goods and services processing less waste, or none at all, and that do not use toxic man-made chemicals

**green procurement**

using products and services that create minimum waste and pollution in production and that use eco-friendly, biodegradable materials
Education

Education is a provincial responsibility, but municipalities need to make sufficient land available.

*Primary schools* are often a determining factor for the design and size of neighbourhoods. The Department of Education standard for primary schools is 40 students per class, resulting ideally in primary schools of 700 to 800 students. It is preferable for learners to attend schools in local neighbourhoods to minimise travel and traffic. A primary school serving 3000–4000 inhabitants can be within a 10 minute or 600–800 m walking distance, along convenient, safe and lit pedestrian walkways and cycle paths.

*Secondary schools* ideally accommodate students at a rate of one secondary school for three primary schools, or 1800–2000 students. Sport and recreation facilities can be shared with other schools and organisations. They should be within 1200 m, and serve a population of 10000–15000.

*Pre-primary schools*, creches and day-care centres should be located in residential areas or adjacent to primary schools, away from main roads or business zones, and have safe and convenient pedestrian access. They should be small scale, serve the immediate neighbourhood within 300–500 m, and have access to a garden. A medium-cost residential housing unit of 500–600 m² is suitable, and conducive to a homely environment.

*Adult education and other community activities* can use school premises after hours, and schools as community learning centres with a mix of uses to maximise use of local infrastructure.
Health
Neighbourhood clinics provide preventive and primary care, larger clinics and day hospitals provide intermediate services, while hospitals provide advanced medical care. Guidelines for provision are:
- **Health posts** and **mobile clinics** available on certain days or for limited hours, within 500 m, adjacent to primary schools, marketplaces or local centres.
- **Health clinics** serving 10000–15000 inhabitants within 1200 m, accessible on foot or local public transport.
- **Day and community hospitals** serve population of 65000–110000

Special health care needs will arise due to increasing numbers of HIV/AIDS affected people. Home-based care can be provided by home or clinic based community health workers. Health services should include preventative health education and monitoring of environmental health risks to reduce illness and its costs. Safety and security, social and traffic control measures that reduce violence and injury are also essential preventative measures.

Social services
Social services cover a great number of services and facilities required in a community area. They involve many different actors and authorities. Some of the social services are possible to co-ordinate and physically integrate in single or ‘one-stop’ facilities at local commercial or community centres, preferably within 1000–2000 m. These include:
- social services (welfare grants payment and social workers)
- post office
- libraries
- fire and emergency services
- police services

Children’s special needs would be part of the social services. The most disadvantaged and vulnerable children may need special services in the form of children’s homes, orphan care, foster homes or other institutional arrangements.

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Environmental health issues
SCUs with higher densities, mixed use areas and urban agriculture require planners to pay special attention to environmental health issues such as:
- air and noise pollution
- traffic congestion
- alternative sanitation and waste water systems that are not properly selected or designed
- health risks posed by keeping animals and poorly made compost
- poor waste management practices and services
- cellphone masts and high voltage power lines close to houses or schools

Many municipalities employ Environmental Health Officers to deal with environmental health issues.

Social welfare services for special needs groups such as HIV/AIDS affected persons and orphaned children should be available at small-scale facilities with a homely environment.

Different health services meet different needs. While preventive health care is available close to home at clinics, more advanced treatment is provided at a main community hospital.
**Neighbourhood Watch**

Community policing involves a working partnership between the police and the community to prevent crime, arrest offenders, find solutions to recurring problems and to enhance safety and security. This partnership should ensure that the lives, property and rights of all citizens are protected and respected, and that the police service is efficient, but based on proper procedures and respect for the rights of accused persons.


Community Policing Forums (CPF’s) should be established to facilitate co-operation between the police, the community in general and specific groups such as neighbourhood watches. CPF’s should provide clear guidelines on the roles and acceptable practices of community members and groups, so that they do not ‘take the law into their own hands’.

**Safety and security**

Poorer communities are more vulnerable to crime and disasters such as fires and flooding, and adequate police, fire and emergency services are essential. They require a local presence to minimise response times, and easy road access to areas. Inhabitants need clear lines of communication and local liaison. Police should establish their mode of operation in consultation with community policing forums.

Neighbourhood designs should minimise safety and security risks, including those posed by traffic to pedestrians, cyclists and children.

**Cultural facilities and community meeting places**

Local cultural activities, entertainment and celebrations build community identity, local culture and social cohesion. As cultural activities and interaction between groups and individuals act as the “glue” of the community, they are an important part of sustainable development. Cultural facilities and community meeting places are needed and municipalities can support cultural services provided by NGOs, CBOs, and religious congregations by allocating land and spaces for hire in community centres. The number, size and location of sites in layout plans will depend on community needs and should be based on consultation. Local parks can also be used.

Community halls and centres should be multi-purpose spaces to provide for diverse activities. Larger community centres can include other facilities and services. Local halls should serve 10000–20000 people within 1 km, but could be integrated or co-located with schools. Multi-functional community centres can serve a population of 25000–40000 people within 1.5 km.

Public open spaces, parks and sports fields can also be used for cultural activities and meetings. Abakwetha or initiation is an important tradition in some communities that requires an isolated space in a natural environment. Community representatives should be involved in the identification of suitable sites for Abakwetha and should play a role in maintaining and protecting it.

**Municipal offices**

Municipal offices should provide for:

- public information and contact
- payment of bills
- provision of maintenance
- monitoring and control
- guidelines, advice and assistance regarding planning and building regulations and services
- housing support services
- support for community initiatives and projects

Municipal offices are preferably located at social service, business or community centres, near public transport and within 2 km of any household.
Commercial services
In the Sustainable Community Unit, which focuses on accessibility and availability of services to pedestrians as a main aim, small and more dispersed commercial services will be available.

The most directly accessible commercial services will be provided as corner shops, neighbourhood centres and local commercial centres. At the housing area level there will be corner shops, informal outlets, market stalls, hawkers and business vendors. These shops may be situated within residential areas, near public transport routes or main pedestrian walkways.

The Community Self Employment Centre (COMSEC)
COMSEC, the key project of the Eastern Cape Job Creation Trust, supports entrepreneurship development and self-employment.

COMSEC provides the following services
Business development services
• Business plans
• Marketing plans
• Business skills training
• Accounting services
• Business registrations
• Facilitation of market access
• Business out-reach programme
Consulting
• Replication of COMSEC model
• Facilitation of SETA contracts
• Umsobomvu Youth Fund Voucher Programme allocating agent
Property
• Small business office and workshop space
• Incubation

www.comsecpe.co.za

GLOSSARY

incubation
start-up support for a small business
replication
repeating the same activity elsewhere
Within a walking distance of 800 metres there should be a neighbourhood commercial centre with daily consumer goods as well as specialised shops for other goods. At a higher level in the hierarchy there should be a local commercial centre serving a number of neighbourhoods with a walking distance of 1200 metres.

The community commercial centre serves an entire community unit or in some cases even two neighbouring communities. It is intended that the maximum walking distance to such a centre would be 2 km, allowing a travelling time on foot of 30 minutes. Such a centre should include daily consumer goods, specialised goods and services, a marketplace, business support centre, municipal support services, health, professional and financial services.

Recreational facilities and open space
Recreational and sport activities require access to suitable local open spaces and facilities. This should include:

- private space next to houses
- semi-private space adjacent to houses
- local open space within or close to a cluster of houses
- larger spaces and sports facilities at neighbourhood and area level

Local open spaces need to be safe, allowing for surveillance and social control via easy access and/or enclosure.

Playgrounds are needed close to home and family, where parents can watch children play, safe from traffic. Children of primary school age can move beyond housing clusters to neighbourhood playgrounds within 500 m with more facilities and space, accessible on foot and without crossing major roads or transport routes.
Sports fields and facilities for sports preferred by the community are needed at neighbourhood level. Sports fields with free access can be controlled and maintained by communities. Co-location with schools and community halls is preferable. Sports requiring special facilities and equipment can be located at community centres. Sport clubs and the private sector can finance and manage such facilities and charge an entrance or membership fee.

Parks and public gardens are important components in the urban structure for aesthetic and environmental reasons. Neighbourhood parks should be within 500 m, and larger community parks within 2 km. Management and maintenance by the municipality can include community involvement.

Major open spaces are extremely valuable for a quality urban environment. A Metropolitan Open Space System (MOSS) with linked green open spaces promotes environmental protection, biodiversity and conservation of unique species. Open spaces also provide for recreation such as picnics, hiking, cross-country running, swimming and climbing, as well as environmental education and Abakwetha. Sites should be available for specific activities, with due control to protect the environment, as well as access from community areas and community involvement in environmental protection.

Cemeteries
The need to reserve land for cemeteries is an issue to be addressed at the Spatial Development Framework level, due to the increasing demand and the specific requirements related to the land use. Ideally each sustainable community area should have sufficient land for cemeteries that is reasonably accessible.

In determining the location of cemeteries the soil conditions, vegetation, ground water and storm water drainage must be taken into account. The landscaping and layout of the cemetery should be based on the need to create a pleasant and restful environment.

The planning process will include an Environmental Impact Assessment.

GLOSSARY
aesthetic
concerning beauty
biodiversity
variety of species of plants and animals
conservation
protection
Environmental Impact Assessment
a legally required study to determine and to prevent or reduce potential harmful effects of a development project on the environment

Cemeteries should be designed to provide a pleasant environment, seating, shade trees and decorative plants.
Characteristics of cemeteries
- Sites for cemeteries must be identified and planned at SDF level as suitable areas are in high demand for other developments
- Sites should ideally be large to minimise infrastructure repetition, but reasonably accessible from community areas
- Soils should be stable but enable excavation
- Sites should be positioned considering drainage and ground water resources
- An Environmental Impact Assessment is necessary
- Cemeteries should have trees and grass that can be mowed
- Sites should be fenced
- Alternatives to burial should be encouraged

Metropolitan Open Space System
Due to the long coastline with a number of rivers and ridges, the metropolitan area has a unique environmental quality. The diversity and unique plants also provide opportunities for tourism and conservation.

This is further enhanced by the metropolitan area being situated at the south-eastern corner of the Cape Floristic Region where five of South Africa’s seven natural biomes (Fynbos, Subtropical Thicket, Forest, Nama Karoo and Grassland biomes) converge. Such a concentration of biomes, particularly within a city, is unparalleled in the world. The metropolitan area also contains three of the 21 international biodiversity hotspots, thus making it extremely valuable from a scientific and eco-tourism perspective.

GLOSSARY

MOSS
Metropolitan Open Space System

floristic region
region with specific types of plants

biomes
areas with specific natural vegetation

biodiversity hotspots
areas with unique and endangered species of animals and plants

verge
area between the road and the erf boundary/sidewalk/pavement
### SERVICES checklist

**How do planning principles apply to services?**

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<th>Applications</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td><strong>Poverty alleviation – meeting basic needs</strong></td>
<td>• Appropriate norms and standards for services:  • Water and sanitation  • Roads and walkways/ bicycle routes  • Waste removal  • Electricity, telephone/internet – access to information  • Health services  • Education/cultural services  • Policing  • Social and welfare services  • Commercial services  • Informal/formal trading spaces</td>
<td>• Improved living standards  • Service availability  • Increased household income</td>
</tr>
<tr>
<td><strong>Focus on special needs groups – HIV/AIDS affected persons, children, the aged, disabled</strong></td>
<td>• Water and sanitation crucial  • Home-based and community food gardens  • Health care services and clinics  • Availability of/access to social and welfare services  • Mobility (accessibility)  • Wheel chair friendly (universally accessible)  • Community based education</td>
<td>• Provision for basic needs  • Improved living standards  • Service availability  • Increased household income</td>
</tr>
<tr>
<td><strong>Gender equality</strong></td>
<td>• Increased access to services and facilities  • Increase participation</td>
<td>• Safer environment  • Women empowerment</td>
</tr>
<tr>
<td><strong>The environment – physical, social, economic</strong></td>
<td>• Energy – alternative/renewable sources  • Alternative sanitation options  • Use of grey water  • Communal waste collection points  • Waste separation and recycling  • Spaces where people can meet  • Playgrounds  • Local open space  • Cemeteries  • Abakhwetha</td>
<td>• Energy conservation  • Social interaction  • Economic opportunities  • Cultural activities</td>
</tr>
<tr>
<td><strong>Participation and democratic processes</strong></td>
<td>• Community involvement in design, development and maintenance of services  • Community based activities/service provision</td>
<td>• Community buy-in, sense of identity</td>
</tr>
<tr>
<td><strong>Local economic development</strong></td>
<td>• Waste removal – community based waste separation  • Environmental care, e.g. clean-up campaigns, tree planting, seed collecting  • Telephone/Internet – kiosks  • Health services – home-based care  • Educational services – Adult Basic Education – skills enhancement  • Policing – community policing  • Social and welfare services  • Home-based care  • Commercial services – home-based economic opportunities  • ATMs  • Informal kiosks  • Labour intensive service installation (Expanded Public Works Programme)</td>
<td>• Poverty alleviation, more diverse environment and sustainability</td>
</tr>
<tr>
<td><strong>Accessibility – public transport and pedestrians</strong></td>
<td>• More accessible services and less need to travel  • Proximity of services  • Proper layout planning  • Pedestrian movement routes and side walks  • Cycle paths</td>
<td>• Cost-efficient mobility  • Time saved</td>
</tr>
<tr>
<td><strong>Mixed-use development</strong></td>
<td>• Clustering of services  • Permitting mixed use in terms of services  • Informal kiosks</td>
<td>• Accessibility, diverse urban environment, cost-efficiency  • Co-operatives and community projects</td>
</tr>
<tr>
<td><strong>Corridor development</strong></td>
<td>• Clustering of services  • Alignment of service provision</td>
<td>• Cost-efficiency, increased accessibility  • Economic viability</td>
</tr>
<tr>
<td><strong>Safety and security</strong></td>
<td>• Structures/facilities for community policing  • Safe design for access to services  • Plan for crime reduction  • Create sense of safety through design  • Street lighting along main routes, walkways and cycle paths</td>
<td>• More attractive areas  • Accessible, safe areas</td>
</tr>
<tr>
<td><strong>Variation and flexibility</strong></td>
<td>• Flexibility in standards  • Design for mix-used development</td>
<td>• More diverse and attractive environment  • Integrated city  • Flexible standards</td>
</tr>
<tr>
<td><strong>Densification</strong></td>
<td>• Clustering of services</td>
<td>• Lower service costs, increased access  • Efficiency</td>
</tr>
<tr>
<td><strong>Reducing urban sprawl</strong></td>
<td>• Densify development  • Clustering of services</td>
<td>• Cost-effective, optimal use of infrastructure</td>
</tr>
</tbody>
</table>
3.4 Transport

The transport system includes different modes of transport for public and private travel and for the transport of goods. The different modes of transport need to be viewed from a holistic perspective, as they should complement each other and be linked in an overall structure. Transport in a sustainable community unit needs to be an integrated system, as spatial structure is largely defined by transport routes. Transport systems enable access to:

- residential areas
- employment zones and job opportunities
- commercial, social and municipal services
- services, also for disabled and other people with special needs
- recreation, entertainment and cultural activities

The way transport is provided is important for achieving integration and sustainability, and influences corridor planning, higher densities and mixed development. Modes to be emphasised in spatial planning for sustainable communities are pedestrian, bicycle and public transport. Motorised transport is a major contributor to air and noise pollution. Too many private vehicles cause traffic congestion, and are not an economic option for commuting. Sustainable cities need to reduce private vehicle use and enable people to commute by providing good public transport and to increase local access to services and employment opportunities.

Walking and cycling

The structure of a sustainable community is based on walking, with a convenient distance to services as the main design criteria. (max. 2 km or 30 minutes). Pedestrian and cycle routes should prioritise safety, security, convenience and direct access, with walking and cycle paths separated from roads on main and feeder routes. Streets in neighbourhoods should prioritise pedestrians and cyclists, and require cars and public transport to reduce speed. Road planning should encourage walking and cycling by designing for lower speeds, safer routes and more attractive walking and cycling environments.

A network of pedestrian walkways is an essential structural component, connecting housing clusters, primary schools, neighbourhood centres, employment areas, community service centres, transport nodes and recreation environments. Walkways should be designed for the needs and safety of children, the disabled and cyclists.

Public transport

Public transport in communities at present is mainly via taxis and buses. Mass commuting to city centres and employment areas is preferable via high capacity buses operating on major roads with special bus-lanes.

Major bus routes should be supported by feeder buses or taxis into neighbourhoods, provided speeds are kept low and there are regular, identified bus-stops. Activity corridors are suitable for feeder buses. Links between feeder and high capacity transfer buses should be at central transport nodes, local employment areas or market places. Commuter rail transport is an option for high volume routes. Both rail corridors and road based transport work best with high density development centred around the stations or stops.
The road network and car transport

The road network should promote easy access, facilitate movement within community units, provide guidance through a clear and understandable road structure and promote safety and security for travellers and pedestrians.

The road network should facilitate easy access to different parts of the city via high capacity transport routes or highways connecting different parts of the city, with:

- special transport route corridors for fast buses, taxis and trains
- a limited number of interchanges and access points on highways
- no pedestrians or cyclists on highways

Within communities the road network should be designed in such a way that traffic is minimised and alternative routes are made available. The number of alternative access/exit points should be maximised in order to reduce traffic movements and to distribute the traffic flow.

Roads in residential areas should prioritise the movement and safety of pedestrians and cyclists, and be designed to:

- subordinate traffic to pedestrians
- minimise traffic and traffic speeds
- provide paths for walking and cycling on the most direct routes
- avoid straight roads over long distances
- provide alternative routes and access/exit points to distribute traffic flow
- provide roadside parking
- use different surfacing materials to distinguish road use and character

Categorisation of roads in a hierarchical structure concentrates traffic on certain routes and junctions, increasing traffic flows, while providing alternative routes enables shorter travelling distances.

A restricted road network with a limited number of access/exit points concentrates traffic at a few junctions, increases traffic flows, intensity and travelling distances.

An open road network with a greater number of access/exit points provides alternative travel routes and reduces travelling distances. The layout and design of roads will determine the speed and can be used to prioritise pedestrians. An open system is suitable in situations with limited traffic.

GLOSSARY

CBD
Central business district of a city or town

feeder routes
local roads leading to main transport routes

feeder buses
local buses taking people to main bus routes or stations
Sustainable transport in South African cities

Roads are important and expensive infrastructure in any development, so it makes sense to optimise the number of people using them. The most efficient, environmentally responsible and equitable way to do this is to prioritise travelling not in private vehicles but via public transport, as the key to a sustainable transport system. Walking and cycling also take up very little space, are non-polluting, and in addition are a healthy way to travel.

It is a good idea to plan for people to live close to where they work, shop or access services, so that they don’t spend a lot of time or money on travelling. Where this isn’t possible it is a good idea to plan for people to live or work close to a public transport route. These routes should pass through the centres of neighbourhoods and directly connect activity centres.

As a guide, the maximum walking distance from any house to a bus stop should be 400 m.

»High-density housing developments should be situated closer to the roads along which buses operate. Development to a depth of at least 200 m on both sides of bus routes is desirable.«

Guidelines for Human Settlement Planning and Design, Chapter 5.2, p.19

»An efficient, safe, affordable, sustainable and accessible multi-modal transport system which is integrated with land-use development to ensure optimal mobility for the residents and users of the transport system in the metropolitan area.«

NMBM Integrated Transport Plan
Vision, 2005

An artist’s impression of what a modern integrated transport system along Khulani corridor could look like

Public Transport Plan, summary presentation, May 2006

A transport corridor in Curitiba, Brasil, supported by high density residential development and mixed use
Designing movement networks for safety

Some questions

• How do most people travel in this area?
• Who is at a high risk when they travel (e.g. school children crossing big roads, walking home in the dark, a dangerous bend in the road for cars etc.?)
• What can we do to make it safer?

Tips

• A Road Safety Audit is an excellent way of identifying potential problems on a new or existing route.
• Plan distinct walkways and cycle paths, separated from vehicular traffic where possible.

Reduce the speed of vehicles on residential roads. Think of ways to do this other than speed humps. Speed humps are effective and relatively inexpensive, but they can cause vehicles to speed up significantly between humps and they enhance noise and fuel inefficiency. Long straight wide roads encourage speeding, so try to avoid these in neighbourhood layouts. Other methods include:

• Chicanes
• Raised intersections
• Different materials at intersections
• Visual uncertainty through hedges alongside roads, no signs or markings
• Table-top crossings
• Mini-circles

Accidents that result in pedestrian deaths or injuries decrease as motor vehicle speeds decrease. But public and user education and enforcement need to complement good design to ensure safe movement in an area.

Many school children walk to school and are vulnerable when crossing roads, especially when they are very small. A good idea is for the schools or parents in the neighbourhood to organise a walking school bus.

For more information refer to www.ccc.govt.nz/saferoutes/wsb/WalkingSchoolBusBrochure.pdf

GLOSSARY

optimise
make as much as possible

multi-modal
with many different types or methods

chicane
narrowed section of a street

table-top crossings
crossings raised above road level

walking bus
a group of children who walk together to or from school as a unit, guided by a few adults
Area layout design – roads and traffic

Neighbourhood area layouts are based on a movement network of linked roads and paths that enable people to move through the area in different ways. Walking and cycling can occur on a non-motorised network, whereas cars, buses, taxis and trucks need a road system. These two movement networks can be separate and can coincide.

To promote safety and equitable distribution of space amongst travellers of various modes, the best solution is an ‘open’ network for walking and cycling, with a more ‘closed’ network to discourage vehicular through traffic. The design of the internal vehicular routes is important to avoid future costs of installing traffic calming. Ideas for slow, safe internal routes include the ‘woonerf’, ‘naked streets’ and ‘cluster layouts’. Faster vehicle routes should run along the boundaries of neighbourhoods, with public transport stops serving the neighbourhood, and accessed via walkways.

New thinking – From road layouts to movement networks

Traditional planning guidelines referred to ‘road layouts’, but these are now described as ‘movement networks’, defined as public right-of-way networks, accommodating any mode of travel. This term signifies a different approach in the design of networks for movement in that:

- Public right-of-way networks, as opposed to road layouts, are the focus of planning and design.
- Reference to conventional road classifications such as ‘access roads’ or ‘distributors’ is avoided to prevent preconceptions regarding the functions and cross-sections of roads.
- Continuous, pedestrian-friendly, public right-of-way networks are promoted over conventional, discontinuous suburban road layouts.

Guidelines for Human Settlement Planning and Design, Chapter 5. Compiled by the CSIR under the patronage of the National Department of Housing

Transport by bike is convenient and environmentally friendly

GLOSSARY

naked streets
streets without traffic signals, signs, sidewalks, markers, speed bumps, or even curbs. This makes motorists drive more slowly and be more cautious, thus reducing accidents

woonerf
a street or area where pedestrians and cyclists have priority over motorised traffic. These shared streets are designed to limit traffic speeds

cluster layouts
cluster housing where vehicle access and/or speeds are limited
## TRANSPORT checklist

**How do planning principles apply to transport?**

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<th>Applications</th>
<th>Results</th>
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<tbody>
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<td><strong>Poverty alleviation – meeting basic needs</strong></td>
<td>• Accessibility to job opportunities and services • Efficient public transport • Subsidised public transport</td>
<td>• Reduced travelling cost, more choice and opportunities</td>
</tr>
<tr>
<td><strong>Focus on special needs groups – HIV/AIDS affected persons, children, the aged and people with disabilities</strong></td>
<td>• Wheelchair friendly (universally accessible)</td>
<td>• Increased accessibility and mobility</td>
</tr>
<tr>
<td><strong>Gender equality</strong></td>
<td>• Provide safe pedestrian access • Safe public transport • Safe and convenient access</td>
<td>• Improved transport = improved accessibility</td>
</tr>
<tr>
<td><strong>The environment – physical, social, economic</strong></td>
<td>• Mode of transport must be environmentally friendly/sustainable • Promote public transport, walking and cycling</td>
<td>• Reduced pollution, and costs • Walking and cycling improve health</td>
</tr>
<tr>
<td><strong>Participation and democratic processes</strong></td>
<td>• Consultation on input and design</td>
<td>• Meeting needs and priorities • A sense of responsibility</td>
</tr>
<tr>
<td><strong>Local economic development</strong></td>
<td>• Applications of transport • Local economic development initiatives in transport</td>
<td>• Access to markets • Location to facilitate accessibility</td>
</tr>
<tr>
<td><strong>Accessibility – public transport and pedestrians</strong></td>
<td>• Plan movement networks for ease of access</td>
<td>• Things are more accessible for everyone</td>
</tr>
<tr>
<td><strong>Mixed use development</strong></td>
<td>• Appropriate mobility network around and in mixed-use areas • Co-ordination of land use and transport planning</td>
<td>• Reduced amount of travelling</td>
</tr>
<tr>
<td><strong>Corridor development</strong></td>
<td>• Increase densities • Trunk buses along corridors</td>
<td>• More efficient public transport</td>
</tr>
<tr>
<td><strong>Safety and security</strong></td>
<td>• Prioritise pedestrian movement • Areas designed for surveillance • Safety of vehicles, speed bumps, traffic calming zones, pedestrian crossings • Increase law enforcement • Feeling of security</td>
<td>• Safety and safe public transport</td>
</tr>
<tr>
<td><strong>Variation and flexibility</strong></td>
<td>• Provide for different modes of transport • Integration of different modes of transport</td>
<td>• More efficient transport • Linkages between different modes of transport</td>
</tr>
<tr>
<td><strong>Densification</strong></td>
<td>• Multi-story development along corridors • Mixed use and zoning flexibility</td>
<td>• Reduced travelling • More efficient public transport</td>
</tr>
<tr>
<td><strong>Reducing urban sprawl</strong></td>
<td>• Increase density • Public transport routes linking higher density areas, nodes, centres and employment zones</td>
<td>• More efficient public transport • Cost efficient transport</td>
</tr>
</tbody>
</table>
Community spirit and sense of togetherness is a feature of sustainable communities.

3.5 Community

Community as a concept refers to how people live together, interact and co-operate. Community development, positive social and cultural interaction and local organisation are essential in a sustainable community, and are supported by:

• good urban design with neighbourhood housing clusters
• definition of areas and provision of public spaces and meeting places
• participative planning processes with representative structures
• identifying and prioritising needs and issues
• ongoing responsibility and community participation in improving and caring for the environment.
• early agreement regarding participation, communication, identification of beneficiaries and allocation processes and criteria
• self and mutual-help activities
• involvement in implementation
• municipal community partnerships

Community – integration and sustainability

Community spirit and a sense of togetherness is a feature of sustainable communities and a basis for their continued development. A sense of safety, belonging, harmony, mutual involvement and the ability to meet one’s needs and to influence the environment, combine to create a positive, high quality community life. People feel they belong in the area, and wish to remain and contribute to its development over time.

Safety and security are essential for social and economic sustainability, and should be based on community co-operation and care, as well as law enforcement. High levels of crime deter investment, development and continued residence by those who can afford to move out of an area.

Well designed, attractive buildings in a safe, pleasant environment, with vegetation and beautiful open spaces create a sense of community well-being and pride. Accessible local public spaces and buildings contribute to social interaction and co-operation.

Community organisation and co-operation in local informal and organised structures enable people to raise issues and problems, and seek solutions together. Local interest groups, CBOs and specific projects and initiatives further strengthen the community fabric and social sustainability. A mixed use environment creates additional interest groups such as the business sector, with an interest in the quality, development and economic sustainability of the area.

GLOSSARY

CBO
community based organisation
allocation processes and criteria
the process whereby services, sites and houses are provided and the factors considered in deciding who will receive them
community fabric
that which characterises and binds a community together
## COMMUNITY checklist

How do planning principles apply to community?

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<th>Results</th>
</tr>
</thead>
<tbody>
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<td>Poverty alleviation – meeting basic needs</td>
<td>• Combine meeting places with LED</td>
<td>• Knowledge/skills transfer/sense of belonging</td>
</tr>
<tr>
<td></td>
<td>• Multi-purpose spaces and centres</td>
<td></td>
</tr>
<tr>
<td>Focus on special needs groups – HIV/AIDS affected persons, children, the aged and people with disabilities</td>
<td>• Community support centres</td>
<td>• Integration and acceptance in the community</td>
</tr>
<tr>
<td></td>
<td>• Easily accessible parks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Multi-purpose centres</td>
<td></td>
</tr>
<tr>
<td>Gender equality</td>
<td>• Accessibility to facilities, e.g. clinics</td>
<td>• Empowerment of women</td>
</tr>
<tr>
<td></td>
<td>• Formal/informal meeting places</td>
<td></td>
</tr>
<tr>
<td>The environment – physical, social, economic</td>
<td>• Community participates in maintaining the public environment</td>
<td>• Cost effective use of resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Beautiful and cared for environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ownership</td>
</tr>
<tr>
<td>Participation and democratic processes</td>
<td>• Opportunities for meeting places,</td>
<td>• Improved implementation of projects</td>
</tr>
<tr>
<td></td>
<td>• Promote public participation and consultation</td>
<td>• Sustained community responsibility</td>
</tr>
<tr>
<td>Local economic development</td>
<td>• Home-based activities</td>
<td>• Economic upliftment</td>
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<tr>
<td></td>
<td>• Opportunities for local markets/entrepreneurs</td>
<td>• Safer working environment</td>
</tr>
<tr>
<td></td>
<td>• Production and trading opportunities</td>
<td></td>
</tr>
<tr>
<td>Accessibility – public transport and pedestrians</td>
<td>• Safe and pleasant pedestrian walkways, cycle paths, bus stops etc.</td>
<td>• Improved pedestrian safety</td>
</tr>
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<td></td>
<td>• Paving and lighting</td>
<td>• Increased mobility</td>
</tr>
<tr>
<td>Mixed-use development</td>
<td>• Building design and access to accommodate mixed-use development</td>
<td>• Accessibility</td>
</tr>
<tr>
<td></td>
<td>• Providing options</td>
<td>• Transport cost saving</td>
</tr>
<tr>
<td>Corridor development</td>
<td>• Better accessibility</td>
<td>• Improved public transport</td>
</tr>
<tr>
<td></td>
<td>• Improved mixed-use development</td>
<td>• Safer public environment</td>
</tr>
<tr>
<td></td>
<td>• Location for community development/multi-purpose centres</td>
<td></td>
</tr>
<tr>
<td>Safety and security</td>
<td>• Layout facilitating surveillance</td>
<td>• Improved safety and security</td>
</tr>
<tr>
<td></td>
<td>• Natural surveillance – use natural topography, landmarks, etc to create more character</td>
<td>• Fewer fences</td>
</tr>
<tr>
<td>Variation and flexibility</td>
<td>• Community participation in planning</td>
<td>• Different needs of the community are met</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased awareness</td>
</tr>
<tr>
<td>Densification</td>
<td>• Provide for different needs and groups</td>
<td>• Greater interaction</td>
</tr>
<tr>
<td></td>
<td>• Corridor development</td>
<td>• More compact social structures</td>
</tr>
<tr>
<td>Reducing urban sprawl</td>
<td>• Centralise services and provide better and bigger range</td>
<td>• Enhanced economic base and social interaction</td>
</tr>
</tbody>
</table>
3.6 Character and Identity

The character and identity of a community area depends on the culture and lifestyle of inhabitants, and the quality of the built and natural environment, which is important to most people, and contributes to social identity and sustainability. Positive and responsible attitudes are fostered by a functional and well designed townscape and pleasant surroundings. Tolerance and valuing diversity are important for social and economic integration.

Creating harmonious townscapes is a difficult art, requiring integration of layouts, streetscapes, building design, landscaping and natural features. Architecture and urban design should confer character and identity, which can be enhanced by public buildings, parks and open spaces.

Local environment

Housing clusters along lanes or around common spaces create the actual living environment, conditions and ambience of an area. Local environments need to be carefully designed at the more detailed planning level, but need to be anticipated and enabled by appropriate area layouts. With stand-alone housing, detailed design is often considered a private issue, but guidelines regarding house design, roof-types and set-backs can promote harmony, diversity and variety.

Existing urban style and character, where positive, should be preserved, perpetuated or complemented. Important aspects of history and culture can be commemorated in precincts with landmarks such as monuments, statues, fountains, murals, plaques and specially planted commemorative trees and gardens as remembrance features.

In designing sustainable communities, character and aesthetics are important to the quality of life and social well-being, and need to be consciously planned and integrated with other essential design criteria. Features need not be complex or expensive – good layouts, housing design and integrating nature into built environments can create quality environments, even for poor communities. Greening of new developments over time is important, and an opportunity for local environmental initiatives. The use of indigenous water-saving plants and trees should be encouraged.

Phased construction of housing and slower expansion can contribute to more harmonious settlements, as opposed to the rapid, standardised, industrial mass-production approach. A slower, more organic approach enables greater community participation in design and implementation, greater variety in design, construction options and features, and therefore greater local and community determined character.

Local activities

The range and diversity of local social, economic and cultural activities enhance the culture and character of an area, and help to attract and retain a diversity of residents. Areas with a rich local character also attract tourists and visitors, who contribute to the local economy and create new local economic opportunities. Local customs and practices, arts and crafts, events and development projects not only enrich the lives of residents but make areas attractive to outsiders. However, areas need to be safe, and ensuring safety and security can provide local income generating opportunities.
The Red Location Museum of Struggle

is a project that involved the construction of a museum and cultural centre that not only reflects the historical memories of the community, but also promotes education, arts and cultural activities. It represents a radically different concept of a contemporary museum in that it is located on a Site of Struggle, within a shack settlement, and not on a greenfields site far removed from the kinds of memories that it seeks to capture. The Red Location Museum integrates public and private spaces and expresses the history and identity of the area.
CHAPTER 3 – SPATIAL PLANNING

Encouraging local culture and identity creates work opportunities at Galeshewe in Kimberley. Unique features developed by local people enhance identity, ownership and care for the environment.

Red Location
Red Location forms part of New Brighton which was established in 1903, as the first settled Black township in Port Elizabeth. The first dwellings erected in New Brighton became known as Red Location, due to the buildings being painted red. Many of these buildings were originally part of a Boer Concentration Camp in Uitenhage, housing a battalion of British soldiers. These corrugated iron houses were dismantled and re-erected in New Brighton by the Public Works Department on a strict grid system.

Red Location has remained the home of Black people from that time. As the first settled urban black community in Port Elizabeth, Red Location became an important site of struggle, and many prominent political and cultural leaders were either born or raised there. They include Govan Mbeki, Raymond Mhlaba, George Pemba and Dan Que Que. The first underground Mkhonto we Sizwe (MK) cell in SA was established in Red Location. The first passive resistance campaign against the pass laws was mounted in Red Location – tragically four men were gunned down and killed by the police at the entrance to the railway station in Red Location in 1949, in response to the campaign.

It is this historical background and cultural significance that inspired the vision of the leaders of the city to initiate a project that would lead to the transformation of Red Location.

GLOSSARY
MK
Mkhonto we Sizwe – Spear of the Nation – the armed wing of the ANC during the struggle (1961–1994)
### CHARACTER AND IDENTITY checklist

How do planning principles apply to character and identity?

<table>
<thead>
<tr>
<th>Principles</th>
<th>Applications</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty alleviation – meeting basic needs</td>
<td>• Provision of basic services</td>
<td>• Sense of dignity</td>
</tr>
<tr>
<td>Focus on special needs groups – HIV/AIDS affected persons, children, the aged and people with disabilities</td>
<td>• Provide parks for children, wheelchair friendly pavements, walls for art and craft areas</td>
<td>• More colourful and accessible areas</td>
</tr>
<tr>
<td>Gender equality</td>
<td>• Provide meeting place such as squares and parks</td>
<td>• Safe areas where the community can participate and have a sense of place</td>
</tr>
<tr>
<td>The natural (physical/green) environment</td>
<td>• Street furniture, parks, landmarks and swimming pools, greening, tree planting</td>
<td>• Leisure, recreation and social cohesion</td>
</tr>
<tr>
<td>Participation and democratic processes</td>
<td>• Involve all generations, ages and cultures</td>
<td>• Ownership and sense of place</td>
</tr>
<tr>
<td>Local economic development</td>
<td>• Create work opportunities by earmarking areas for unique development</td>
<td>• Investment and work opportunities</td>
</tr>
<tr>
<td>Accessibility – public transport and pedestrians</td>
<td>• Use different materials on different surfaces, wheelchair friendly pathways and specific street furniture, cycle paths, walkways, pedestrian crossings</td>
<td>• Safe flow of people and vehicles</td>
</tr>
<tr>
<td>Mixed-use development</td>
<td>• Buildings designed with specific themes, housing blocks and marketplaces with themes</td>
<td>• Sense of place</td>
</tr>
<tr>
<td>Corridor development</td>
<td>• As above</td>
<td>• As above</td>
</tr>
<tr>
<td>Safety and security</td>
<td>• Cameras, pedestrian crossings and proper lighting</td>
<td>• Safe environment, reduced crime</td>
</tr>
<tr>
<td>Variation and flexibility</td>
<td>• Using different materials and apply themes</td>
<td>• Sense of ownership, interesting and beautiful environments</td>
</tr>
<tr>
<td>Densification</td>
<td>• Urban designs with proper controls, use of materials on buildings</td>
<td>• Liveable areas, orderly, neat, compact SCU’s, an aesthetically pleasing urban environment</td>
</tr>
<tr>
<td>Reducing urban sprawl</td>
<td>• Densified development • Improve public transport</td>
<td>• Sustainable environment • More efficient and effective cities</td>
</tr>
</tbody>
</table>
3.7 Urban Planning Structure

Urban areas develop over a long time and additions and renewal of the structure are based on visions and trends. The reality of urban development seldom follows a prescribed pattern and the passing of time and contemporary principles are reflected in the urban structure. This creates a dynamic and interesting city and living environment. The theoretical models for urban structure are used for analytical studies and for inspiration in the plan preparation process.

The most common models are the nodal structure and the linear development structure. These can then be combined in different variations that create complex models.

- **Nodal development model**
  The Nodal Development Model assumes an urban centre with radial roads and transport routes reaching out to the peripheral areas. The centre would contain major services and economic activities. In practice this model would exist only in smaller settlements as the need for alternative movement patterns in larger settlements results in by-passes, circular roads and new centres on the outskirts of the urban area or along such circular roads.

- **Linear development model**
  The linear development model has the main functions and services located along traffic and public transport routes. The residential areas and employment zones are developed parallel to the linear centre and access to the centre is provided perpendicular to the linear pattern. Often the residential and employment zones are located on either side of the centre in order to optimise transport movement.

- **Combined models**
  In the application of development models, combinations and alterations are common, as urban expansion in general is based on the existing historical built environment. The structures can be varied and different principles are applied particularly in large cities.

  Historical nodal development with one main centre can grow, based on a multi-nodal structure with interlinking transport routes. Alternatively the centre can develop along main radial routes based on a linear pattern. Activity corridor concepts are an adaptation of the linear development model.

- **Sustainable communities model**
  The development models above tend to be based on the main centre function and the road and transport systems. In the sustainable communities model the focus is put on the needs of the household and the local community. The structure may include linear and nodal elements.

  The scale and layout of the Sustainable Community Unit is based on walking as the primary mode of movement with a maximum walking distance of 2 km to essential services. Convenient access to public transport and employment areas is an additional key principle.
The spatial structure of a Sustainable Community Unit may include the following structural elements:

- Housing clusters
- Neighbourhood units
- Central nodes
- Activity corridors
- Public transport corridors
- Employment areas/Markets
- Urban agriculture
- Pedestrian/Cycle paths
- Public open space

**Housing clusters**
The primary structural unit in the Sustainable Community Unit is the housing cluster that would consist of a sustainable group of houses or blocks of flats. The cluster should promote the sense of identity and togetherness, which can be achieved through location around a common open space, along a short street or through the use of urban design features and landmarks. In the cluster area there should be a sequence of open spaces which can be private, semi-private and public.

**Neighbourhood units**
At the neighbourhood level the functional and social integration should be noticeable. The availability of services and employment areas, commercial centre and public transport would characterise the neighbourhood units. The structure would include different housing categories with a variety of housing types and densities. Pedestrian walkways will connect the housing clusters to the main services centres, employment areas and public transport nodes.

Neighbourhood units are often based on the catchment area for a primary school, with a clinic, local shops and recreational facilities at a maximum walking distance of 800–1000 m. Three or four neighbourhood units may support a local commercial centre, secondary school and community centre.

**Central nodes**
The daily needs of a household will, to a great extent, be met through small commercial centres in the neighbourhood units. More advanced service needs would be conveniently found in the local centre or in the main commercial centre of the community. In many cases this would be located at the transport node where public transport, private vehicular traffic and main pedestrian walkways meet. High density housing, commercial and social services and businesses would be found in central nodes.

**Activity corridors**
The activity corridor provides for the same functions as the central nodes but based on a different urban design concept. With the intention of facilitating mixed development and a more urbanised environment, the structure would be based on the linear development model. In the activity corridor an attempt is made to promote a more dynamic and flexible use of central areas.
Public transport corridors
Public transport within an activity corridor would move at a speed adjusted to the active and mixed environment with frequent stops to achieve convenience and accessibility. The high capacity and efficient public transport routes that connect different parts of the community and link the different community areas with other centres, employment areas and commercial services in the Metropolitan area require special public transport corridors.

Employment/Markets
In immediate proximity to the housing clusters there should be home-based businesses, on-site urban agriculture and communal gardens. Mixed development will be encouraged in residential zones. In local centres and along activity corridors, more formal economic businesses will be found with easy access from home and accessibility for customers. Market areas for locally produced goods or retail services will be located near central nodes or along an activity corridor.

Urban Agriculture
Provision should be made to encourage people to grow vegetables and other produce on site. Within the housing clusters or in adjacent open areas, community gardens or allotment areas will allow for more efficient urban agriculture, resulting in produce that can be sold to shops or at the community market areas.

Pedestrian/Cycle paths
In a structure that is based on pedestrian movement as the basic design principle, pedestrian walkways and cycle paths are an important structural element. The network of pedestrian walkways and cycle paths would connect the housing clusters with main service facilities, employment areas and public transport.

The needs of children, the disabled and other vulnerable groups must be catered for in the design. Safety and security should be promoted by providing street lighting and avoiding route alignments through areas that cannot be put under surveillance. A child should be able to walk safely from home to school.

Public open space
The local public open space within the housing cluster will include playgrounds, meeting places and possibly allotments or a communal garden.

Within the neighbourhood units there would be public parks, sportfields, public squares and landscaped urban spaces.

At the community area level there will be major sports fields, open areas for community events, community parks and natural open areas available for recreation and sport. Suitable areas for Abakwetha will be identified in the community area plan. Sufficient land for cemeteries needs to be reserved.

Adjacent to the community area there will be protected open spaces, forming part of the main municipal open space system, with direct access from the community area on safe and convenient walkways.
The Bloemendal pilot project area with the main features of the plan proposals.
for your notes
The essential shift is from planning for people to planning with people, which engages their understanding, ideas, commitment and energy in planning and implementation.

The Planning Process

Planning for sustainable communities requires a holistic approach that involves all stakeholders in an integrated process. This intermediate level is the first larger scale level at which real and meaningful community participation in planning is possible. Co-operation between municipal departments, government departments and with community and other stakeholders should be comprehensive and sustained during planning, implementing and review processes.

The planning process develops a shared vision among stakeholders, based on appropriate development and urban design principles and an agreed process and method. It is integrated with other institutional processes and involves community stakeholders to understand their needs, views and aspirations and to mobilise participation and support.

Participation enables communities to play an active part in developing their areas, to address their own needs and problems, and to build local capacity. Community involvement in the planning process requires:

- awareness of the opportunity to influence development and decision-making
- enhanced communication to inform people
- capacity building and community education processes
- involving political leaders and other representatives
- engaging or forming community structures for sustained participation

The essential shift is from planning for people to planning with people, which engages their understanding, ideas, commitment and energy in both planning and implementation.
The planning framework
Spatial planning at the intermediate level is a component within the planning framework of the municipality. It is closely related to the principles of the Integrated Development Planning (IDP) approach and the linkage to the Spatial Development Framework (SDF) is emphasised. Furthermore, the role of the sustainable community unit planning is to provide a basis for the detailed planning and sector planning initiatives. In this way the different levels of spatial planning will be appropriately inter-linked and also connected to the financial and budgetary planning as well as to the implementation programmes.

Planning framework levels
Spatial planning at Sustainable Community Unit level links and fills the gap between municipal level IDP and SDF planning and more detailed layout planning.

- Integrated Development Plan, IDP
- Spatial Development Framework, SDF
  - Sector plans
  - Financial plans
  - Implementation Programme
- Sustainable Community Unit plans
- Detailed development plans
The sustainable and integrated planning process
Planning and implementation are sequential and interconnected. Both involve parallel activities by a network of actors, and it is essential to establish project structures and clarify roles, participation, and communication processes. Intermediate level planning includes spatial and non-spatial aspects, and requires co-ordination of planning, implementation and co-operation among all stakeholders.

The Planning Process

The planning process has three main phases linked to each other.

1. Programming
2. Planning
3. Implementation

Although different phases in the planning and implementation process are sequential, they may overlap. The Plan Review may also result in renewed planning activity and a new planning process will start. This process may continue over a long period of time.
The planning process is comprehensive and detailed. The programming, planning and implementation phases all consist of a number of stages.
4.1 The Programming Phase

The Programming Phase involves the groundwork for the Planning Phase and consists of the:
- Plan Initiative
- Planning Preamble
- Planning Programme

In this phase the overall programme for the planning process is developed and approved, including the project background, needs, scope, goals, schedule of work and resources. This requires political commitment to planning the project and commitment of the necessary financial resources.

The Plan Initiative

When a municipality decides to prepare a community area spatial plan (in the context of IDP and SDF plans for long-term spatial development), the plan initiative:
- describes the project purpose
- re-states SDF recommendations
- outlines the vision for development of the area
- states the general principles to be applied

The municipal department leading the planning process presents the plan initiative as an initial proposal and motivation to politicians for discussion and approval, after which a cross-functional task team and steering committee should be established for the project. Already at this stage the involvement of the community representatives should be prepared and information should be provided to the community.

The Planning Preamble

Approval of the Plan Initiative leads to a preamble which outlines the existing situation, background, restrictions, uncertainties, proposed projects and expected results in greater detail.

Planning background

The background includes a review of existing plans and policies that affect the area and that may influence the plan. Sources can include:
- the IDP and SDF
- structure and sector plans for transport, infrastructure, open space, etc
- the IDP Implementation Programme
- the IDP Financial Plan
- policy documents concerning the area
- the Environmental Management Policy and Framework

Previously proposed projects

Actual and proposed development projects in the area that impact on spatial development are identified and assessed. These include housing, infrastructure, transport, service, environmental, local economic development, community assistance, and social development and private sector projects. Information on projects is facilitated by early stakeholder participation.
Planning area delineation

The Sustainable Community Unit is delineated according to agreed criteria. Delineation depends on size, population, topography and existing urban features, road networks, public transport systems and planned development of existing, adjacent or new areas and is further more based on 2 km walking distance radius. Ideally this would be determined as part of the SDF, which would provide for the tentative delineation.

Current land use and regulations

Current land use in the area is mapped using aerial photographs and field studies. The land use is compared to the land use regulations, using layout and zoning plans, records of re-zoning, subdivisions and changes of use. It may also be relevant to consider adjacent areas.

Existing conditions

The natural and built environment and features, opportunities and limitations for development must be described. The natural environment is mapped in terms of land, soil, vegetation, fauna, protected or sensitive areas, and current and potential negative environmental impacts must be specified.

Existing infrastructure, community facilities, and their capacity and condition are assessed, as development creates additional demands, and opportunities for upgrading. Information collected at this stage focuses on available data, but a baseline survey may be necessary, if information is limited. More detailed assessments and analysis are carried out in the Planning Phase.

Issues to be included in the baseline study

Physical
- Topography
- Geology and Soils
- Vegetation
- Built-up areas
- Land-uses
- Housing
- Existing Infrastructure
- Services and facilities
- Servitudes

Environmental
- Natural resources
- Protected areas
- Sensitive environments
- Pollution
- Floodline

Socio-economic
- Community vision and perceptions
- Demography
- Economy
- Employment and income
- Unemployment
- Skills audit
- HIV/AIDS
- Participation and democracy

The baseline study will analyse the existing situation, assess the backlogs and constraints and identify the implications.

A baseline study can be carried out during the programming phase or as part of the planning investigations.

GLOSSARY

**delineation**
deinition of boundaries

**zoning**
defines the purposes for which land may be legally used

**fauna**
types of animals

**baseline survey**
survey providing initial data against which future development is measured

**servitude**
right of access on property e.g. for a pipe line or an access road
**Baseline Quality of Life Surveys**

**OBJECTIVE quality of life indicators**

**Demographic:** mortality rate; fertility rate/births; divorce/separation rate; female-headed households; orphans; household structure

**Socio-economic:** monthly household income; unemployment; registered new business; businesses getting assistance at business support centres.

**Housing:** Housing type categories, size; dwellings in private ownership; tenure, distribution of alternatives; occupancy rate

**Services:** Water for domestic use/service levels; electricity; sanitary services; roads, type of surface and drainage; public transport; availability of land-line telephones; playgrounds and green areas in housing clusters; municipal and community services.

**Health:** Infant mortality rate; child mortality rate; adult mortality rate; availability of street addresses; type of health service accessible

**Education:** Highest school qualification; tertiary level qualifications

**Democracy & participation:** Registered voters; participation rate in elections; involvement in Community Based Organisations/NGOs.

**SUBJECTIVE quality of life indicators**

**Level of satisfaction with accessibility in or near the neighbourhood:** health care services; primary health care services; playground and green areas; communal meeting place/community centre; schools within convenient walking distance; shops for the purchase of daily groceries; public transport (bus stop); a taxi rank or taxi pick-up point; postal services; banking services (e.g. ATM); a pension pay-out points; a public library; public phones.

**Quality of:** health care at primary health care services; quality of roads; illumination at night; safety of persons and their possessions; police protection; pollution of the neighbourhood by domestic and other forms of solid or liquid waste; levels of air pollution; the draining of storm water after rain; recreational facilities.

**Evaluation of the neighbourhood as a whole:** Past–present comparison regarding the improvement of living conditions in the neighbourhood.

Information can be obtained through a baseline study at this stage or as part of the later planning investigations. The study can be carried out using a participatory approach. This will enhance the possibility to achieve closer co-operation with the community and to gain knowledge not only about existing conditions but also issues, expectations and priorities of communities.

**The Planning Programme**

The completion of the Programming Phase will include the Planning Programme, which describes the plan preparation process and recommends that council authorise it. The Planning Programme includes the proposed:

- timing and planning schedule
- resources required to undertake the planning
- institutional arrangements for planning
- arrangements for public participation and consultation
- communication strategy

**The work plan for plan preparation**

The work plan outlines activities, timing and distribution of responsibilities based on agreement and consultation with stakeholders, including provincial and national departments and contracted consultants and NGOs. The timing specifies benchmarks in the plan preparation process for decisions or presentation of results. Meetings of the steering committee and major stakeholders, reporting to political committees and progress reports are scheduled, together with proposed plan completion and approval dates.

**The decision on planning programme**

Council or a mandated sub-committee is responsible for the planning go-ahead decision. Documents required for this decision are the Plan Initiative and the Planning Preamble.

It is appropriate to involve community and stakeholder representatives at this stage, so they can contribute to goal setting and verification. Principles and mechanisms for participation should already be established.

**Working with consultants**

Much planning work is done for municipalities by consultants and it is important to employ only reputable and appropriately qualified professionals with proven experience. For SCU projects, it is essential that consultants understand the sustainable communities vision, principles and approach, and that they work closely with municipal officials who are responsible for projects.

In working with consultants, it is essential to formulate clear Terms of Reference which specify in precise terms:

- the purpose, nature and scope of the project and their contribution
- project phasing, project deliverables and time frames
- the budget and phase of expenditure
- arrangements and conditions for payments
- clear roles, guidelines and processes for co-operation
- communication, reporting and monitoring procedures
- stakeholders to be involved, including community participation
- collaboration required with officials, stakeholders and organisations

In this approach, consultants are partners in the planning process, or some aspect of it, and it is essential that they understand the whole project and the SCUs approach.
4.2 The Planning Phase
This is the heart of the planning process, where creative design work determines the nature and quality of the development. It includes:
• The Initial Planning Stage
• Plan Preparation
• Formulation of Proposals
• Plan Approval

In the past, Plan Preparation focused on technical and environmental aspects, but a sustainable communities approach also emphasises:
• qualitative, non-spatial, economic and social aspects
• thorough preparation
• links between planning and implementation
• stakeholder consultation and participation
• co-ordination and co-operation between sectors, departments and spheres of government

Initial Planning Stage
The Initial Planning Stage establishes the framework and basis for Plan Preparation in terms of data and information, logistical and institutional arrangements, and a common understanding of goals, objectives and issues. Further and complementary investigations, field checks, analysis and discussion with stakeholders via meeting and workshops are now needed.

Start-up meeting
The start-up meeting or workshop which launches the plan preparation process includes:
• a structured analysis of needs, problems and issues
• presentation of goals and objectives
• outline of the planning process activities and resources
• community involvement and stakeholder participation
• proposed mechanisms for communication, co-operation and management
• acknowledgement of risks and assumptions
• space for questions, discussion, feedback and input from participants

It is essential that all stakeholders attend the start-up meeting. Planners on the planning team, task team and steering committee (see section 5) lead the workshop, which should take place in the community unit.

Planning investigations
The need for planning investigations depends on the scope of the plan and gaps in available information. Methods include:
• baseline or complementary studies
• desktop studies
• mapping and updating of maps
• sample surveys and interviews
• field checks
• workshops and group discussions

Co-operation between planners, engineers and other professions
It is imperative that planners, engineers, land surveyors, architects, urban designers and quantity surveyors co-operate with each other to develop integrated and sustainable human settlements. The various disciplines should be engaged as early as possible in the plan initiative phase to facilitate joint understanding of the SCU approach and the nature, scope and deliverables of the project.
Designing service infrastructure for sustainable communities requires close co-operation between engineers, planners and professionals representing specific sectors, based on a shared SCU vision and design criteria. Layouts and service infrastructure need to be designed with social, human and aesthetic considerations in mind. Engineers need to understand the social intentions of planners and sector professionals, who in turn need to understand the practical engineering technologies, possibilities and constraints, and their related costs. This multi-disciplinary cooperation should result in a creative balance of practical realism and social idealism.

GLOSSARY
benchmarks points in the process when specific things must be achieved
stakeholders all groups involved, or with a direct interest in a project or organisation
verification approval as valid
An up-to-date base map in digital format is essential, and can save on field surveys. Aspects covered include physical, socio-economic, environmental, economic and community characteristics. Community meetings contribute information, verify issues and concerns and prioritize goals and objectives. Planning investigations provide a basis for identifying quantitative and qualitative indicators that can be used to evaluate results.

During the investigations a participatory approach should be used. Through this involvement the planners will have the opportunity to ensure that the objectives and issues are given the right priority and that the focus of the planning project is in accordance with aspirations and preferences.

**Planning analysis and assessment**

Analysis and assessment are based on information obtained in the Programming and Planning Investigation. Analysis includes aspects which determine spatial structure such as:

- land use distribution
- densities
- walking distances and pedestrian movements
- mixed development
- access to services and job opportunities
- traffic and public transport, infrastructure and service facilities
- topographical and physical conditions, to identify areas suitable for development
- sensitive areas, ecological conditions and flooding risks that restrict development

Non-spatial analysis deals with socio-economic aspects:

- demographic characteristics
- household structures
- employment and income levels
- safety and security problems to identify “hot spots” or “danger zones”
- the consequences of HIV/AIDS and other health and social conditions
- community characteristics such as self image and organisation

These factors are relevant to planning for economic development, affordability, standards and service provision, and community participation in the development process.

This stage concludes with estimated requirements regarding municipal and other resources needed to implement the project. Key factors that will impact on area growth and development and the resulting land requirements and spatial structure are:

- the population forecast
- assumptions regarding household structure
- economic development potential
- planning standards
- design principles

Politicians and planners can only learn all there is to know about a city from its residents – only they know their city well enough.

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**SCU planning – budget sources**

- Political budget – preliminary SCU planning
- SDF funding – SCU is an outcome of SDF process
- Ward budget – Ward Committees consultation
- Transport funding – integrated transport planning
- Economic Business Unit – LED aspects
- IDP funding

**Budgeting for Sustainable Communities Planning**

Many aspects of SCU planning such as staff and normal operating costs will be funded via normal departmental budgets. However, provision must be made for additional extra-ordinary planning costs, including the following:

- The participatory process – meetings, workshops, transport
- Publicity materials – posters, pamphlets, booklets, exhibitions
- Up-to-date aerial photographs and maps
- Consultants
- Baseline Study
- Budgeting for implementation

It is also important to estimate staff capacity and time required from specific departments, as this is generally funded via their budgets. Budgeting for implementation is essential.
Assessments should verify issues and priorities agreed upon earlier. The participatory process may result in alterations and additions, which the steering committee should approve. The results are then presented to all stakeholders via a report, presentations, exhibitions and workshops.

**Plan Preparation**

This involves preparing alternative proposals and scenarios for spatial and non-spatial aspects of development, and assessing their environmental, social, economic and institutional impacts, together with community representatives and stakeholders.

**Planning scenarios**

The planning investigation, analysis and assessment and forecasts enable planners to prepare planning scenarios, which include alternative development strategies to solve problems, address issues and achieve goals. These can be rough sketches or more elaborate proposals, but should be easy to understand to enable evaluation by stakeholders.

Multi-disciplinary co-operation between municipal departments is necessary to formulating realistic alternative proposals and scenarios as a basis for the next stage – formulation of plan proposals.

---

**Co-ordination with other development projects**

Synergy is needed between the various urban development programmes. Current programmes in Nelson Mandela Bay Municipality include the Motherwell and Helenvale Urban Renewal Programmes; the Zanemvula Project (an Informal Settlement Upgrading and Human Settlement Development Project at the scale and level of the Cape Town N2 Gateway Project); Red Location precinct development, as well as the renewal programmes associated with the restructuring.
Impact assessment
The evaluation of scenarios involves assessing the impacts in terms of:
- the natural environment and resources
- qualitative aspects of the urban environment
- social and community aspects
- economic development
- financial implications
- institutional requirements

Impact assessments can be carried out in-house or by a consultant, but various municipal departments should be involved, and results presented to stakeholders in written information, workshops, meetings and exhibitions, giving participants the opportunity to comment and contribute.

Presentation of Results
Although there would have been continuous involvement of community representatives, politicians and other stakeholders, it is important to set aside time for formal presentation of the alternative solutions, scenarios, preliminary proposals and the results of the impact assessment to the various groups at this stage of the planning process.
Formulation of Plan Proposals
The proposals must take into account the results of the evaluation of scenarios and the impact assessments. They will include development strategies and land use proposals, implementation aspects and funding, and will cover the following spatial and non-spatial aspects:

- evaluation of preliminary planning proposals
  - spatial aspects
  - non-spatial aspects
- economic development
- environmental concerns
- socio-economic development
- social development and services
- infrastructure services
- the implementation programme
- financial aspects
- administrative and institutional development

The community unit plan identifies areas for layout plans and specific projects, and recommends their phasing and timing.

Plan Approval
Procedures for plan approval are prescribed by planning legislation, and municipal councils have the power to adopt intermediate level community unit plans that conform to their spatial development frameworks. Following the decision, the approval can be announced and presented to the community through exhibitions or other means of communication.

Issues on which public/community acceptance is necessary
The Planning Programme
- community representation
- formulation of objectives
- identification of issues

Plan preparation
- assessment of issues and priorities
- verification of objectives
- evaluation of scenarios
- plan proposals

Implementation
- implementation programme
- detailed planning process
- cost sharing
- community involvement

Plans proposals, Bloemendal pilot project

<table>
<thead>
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<th>NOTATION</th>
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<td>PLANNING AREA BOUNDARY</td>
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<td>MAJOR ARTERIALS</td>
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<td>MINOR ARTERIALS</td>
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<td>PROPOSED EXTENSION OF STANDFORD ROAD</td>
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</table>
4.3 The Implementation Phase

The Implementation Phase will vary depending on the scope and nature of the development project. It includes a strategy, detailed planning, identification of development projects and actual construction, monitoring and maintenance. The link between planning and implementation is an important aspect of the IDP process. At the Sustainable Community Unit level the implementation programme will be detailed and concrete.

Implementation programme

The Implementation Programme provides the strategy and timing for the realisation of the plan proposals. It will facilitate efficient co-operation between municipal departments and involve other stakeholders.

An implementation programme includes:
- a schedule for implementation and construction
- a detailed development planning schedule
- action plans and responsibilities
- cost estimates and funding arrangements
- institutional requirements
- stakeholder roles and responsibilities
- a community participation process
- co-ordination of inputs by municipal departments, other government agencies, consultants, developers, landowners, contractors, NGOs and community
- a monitoring and review plan
- a maintenance and land use management plan

In the Implementation Phase, the planning team becomes or is replaced by the project management team, with an appropriate shift in membership to include key managers from departments central to implementing projects, e.g. engineering, housing and transport, also provincial departments such as health, welfare and education.

The steering committee could be expanded to include new actors, as the focus shifts from planning to implementation. The municipal unit managing implementation is responsible for:
- co-ordination of the project management team
- detailed planning of sub projects
- ensuring financing of infrastructure
- overseeing construction work
- overall monitoring and quality control
- chairing the steering committee
- organising stakeholder participation

A workshop involving all stakeholders should approve the Implementation Programme.

Detailed development planning schedule

The SCU plan will indicate the phasing of the proposed development, which will be approved by the municipal council but would still be tentative. Moving into the implementation phase, the detailed planning schedule is prepared to specify the delineation of project areas and the
timing for detailed plan preparation and construction. This schedule will be important for the preparation of programmes for infrastructure and service provision.

**Action plans, cost estimates and funding**
The detailed planning schedule is followed by more precise action plans, outlining activities and distribution of responsibilities. At this stage engineering designs are prepared, that will be used for final cost estimates and for securing funds.

Institutional requirements may include the setting up of a project management team, reference groups, monitoring and evaluation teams and municipal co-ordinating departments.

**Stakeholder and community responsibilities**
The stakeholders and communities will be involved in the implementation in different degrees depending upon agreements regarding sharing of responsibilities. In particular, if it is assumed that stakeholders will play a role in construction, operations and maintenance, they need to be consulted early in the process. Public-private partnerships and public-community partnerships for service provision and other aspects should be prepared at this stage.
Monitoring and Plan Review

Monitoring methods are identified in the programming phase, and monitoring starts during the planning phase, as an aspect of project management. Monitoring is based on outcomes of different stages of the planning and implementation process, specified in work programmes, schedules and budgets. A feedback and reporting system keeps all actors and stakeholders informed on progress and any problems that arise.

Planning process monitoring

The municipal team managing the project is responsible for monitoring planning activities. Monitoring tools include checklists, benchmarking, critical path schedules, and planning process indicators.

The achievement of qualitative goals and objectives must be assessed using the criteria of integration, mixed development, higher densities, accessibility and availability of services, provision for employment opportunities and quality of environment. Community and stakeholder participation in the planning process is also monitored, and records kept of all events and activities in the process, to facilitate evaluation and review.

Implementation monitoring

At the intermediate planning level, implementation is a direct continuation of the planning process, and the two may overlap, with detailed planning continuing after implementation has begun. The implementation process is complex, involving many actors over a long period of time, and requires ongoing municipal management, co-ordination and monitoring. The project steering committee monitors the project and requires regular and appropriate reports from the project management team.

Information is usually stored in each municipal department, but new digital technology, networks and a general GIS greatly facilitate information sharing, co-ordination and reporting. Monitoring as an integral aspect of project management:

- provides regular and timely feedback
- enables assessment of progress
- identifies problems to be solved
- tracks adherence to schedules and deadlines
- tracks expenditure against budget
- tracks stakeholder participation
- checks performance of contractors, the quality of work and other qualitative dimensions

Internal monitoring, reporting and evaluation should happen at regular meetings, and community feedback and participation should inform these processes.

Plan Review

IDP, SDF and sector plans are reviewed and adjusted every five years, but community level plans may need to be reviewed more often. A Plan

Housing Programmes
- Project Linked Subsidies
- Housing Subsidy Scheme (HSS)
- Rental Housing Subsidy
- Institutional Subsidy Housing
- Human Settlement Redevelopment Programme
- Establishment Grant
- Hostel Redevelopment
- Incremental Housing
- Social (Rental) Housing
- Informal Settlement Upgrading
- Inner City Housing
- Infill Housing
- Special Needs Housing: AIDS, disabled, aged, etc.
- Co-operative Housing
- People’s Housing Process
- Bank Financed Housing
- Employer Assisted Housing

GLOSSARY

GIS
Geographic Information System – computer-based mapping and data information system
Review may require council approval, and can be limited to certain aspects, components, areas or issues – the complexity and scope depend on the needs.

**Maintenance and land use management**

Maintenance and land use management occur after implementation, but sustainable community principles should guide ongoing regulation of development, zoning and land use. Maintenance and its cost need to be taken into account at the planning stage, and included in cost recovery estimates. If implementation and maintenance involve community participation and cost-sharing, this needs to be agreed and included in the implementation programme and financial plan.

**Example of report format**

1. Introduction
2. The Study Area in Context
3. Baseline Study
4. Goals and Development Principles
5. Main Proposals
6. Components
7. Consequences of Proposed Plan
8. Phasing of Development

The plan reveals its value only with implementation
4.4 Project structures

The structures responsible for planning and implementation have a determining influence on the planning approach and implementation. Co-ordination and co-operation between municipal departments, government departments and other stakeholders is essential. The initial stage of the planning process establishes the project administration structure, involving relevant municipal actors. Project management responsibility needs to be clearly located, and a steering committee, planning team (project management) and inter-departmental task team are formed early in the process.

The steering committee

The project steering committee includes appropriate political and senior departmental representatives who meet regularly during the planning and implementation process and at particular milestones when:

- reports and results are considered
- key workshops mark the beginning and completion of process stages
- specific plans and proposals are finalised

The steering committee reports to official municipal committees and decision makers.

The planning team

The planning team manages the overall project including the planning process, communication strategy and co-ordination of inputs from other departments and stakeholders. They carry out, delegate or contract out aspects of actual planning. The role of the planning team changes on completion of the Planning Phase, and its composition is reviewed in the Implementation Phase, as responsibility shifts from planners to those who manage implementation.

The task team

The task team includes representatives from relevant departments and co-ordinates the planning process and plan preparation. Its composition may change during the process phases, depending on who is most needed. The lead department and planning team are responsible for project management, including overseeing the task team representing:

- Spatial Planning
- Housing
- Transport
- Infrastructure Engineering
- Environmental Services
- Economic Development
- Any other relevant stakeholder

Inter-departmental co-operation

The integrated approach to planning and development requires close co-operation and links between departments with technical, social and financial responsibilities such as:

- Technical – Infrastructure Engineering, Housing, Land Acquisition, Transport, Roads, Parks, Water and Sanitation,
• **Social** – Health, Environmental Services, Economic and Enterprise Development, Tourism and Agriculture, Safety and Security, Sport, Culture and Recreation, Community Development, Urban Agriculture, Social Services

• **Financial** – Budget and Treasury

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**Project structure**

- **Municipal Council**
  - Ward councillors
- **Project Steering Committee**
  - Sector departments
  - Ward councillors
  - Sector dept. managers
  - Other key stakeholders
- **Planning Team**
  - Lead department and sector department officials
  - Provincial dept. officials
- **Task Team**
- **Development Forum**
  - Key community stakeholders
  - Ward councillors
- **Ward Committees**

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**Planning Team responsibilities**

- Dissemination of information (the planning preamble, survey, workshop, participatory event and meeting reports, planning scenarios, planning proposals and communication and implementation programmes)
- Arrange consultation with municipal departments, community representatives and other stakeholders
- Collect data and information
- Mobilise other units to compile, analyse, review and assess issues and proposals
- Co-ordinate implementation

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**Task team responsibilities**

- Review progress and monitor the programme
- Provide input and advice on time schedules and deadlines
- Channel requests for contributions from other units
- Assist in collecting and presenting information
- Advise and assist in appointment of consultants
- Review reports and findings
- Assist in the community participation program and public presentations or hearings
- Recommend adjustments or additions to alternative solutions and preliminary proposals and implementation programmes
- Provide guidance and support on issues contained in the Sustainable Community Plan
- Distribute information to all stakeholders within the municipality
4.5 Institutional linkages

The IDP process emphasises that not only should there be integration at the municipal administrative level, but close co-operation and co-ordination should also be effective between different spheres of government. In the initial stages, linkages with relevant provincial and national authorities should be reaffirmed, contact persons identified and methods of communication agreed upon.

It is essential to involve national or provincial departments with local responsibilities such as education, health, welfare policing and environmental protection, as they need to contribute to area planning, and incorporate it in their own plans and budgets.

Links to other agencies

The Breaking New Ground Strategy of the National Government, also known as the Comprehensive Plan for the Development of Sustainable Human Settlements, is very clear on the principle that services infrastructure is more than the provision of water, roads, electricity, sanitation, etc.

There is a need to move towards the more holistic development of human settlements, including the provision of social and economic infrastructure. It is therefore essential that the need for such social/community and economic facilities should be identified in the audit and planning stages. A multi-purpose cluster involving various stakeholders should plan the provision of facilities such as parks, playgrounds, sport fields, crèches, community halls, taxi ranks, satellite police stations, municipal clinics and informal trading facilities.

Cluster agencies could include, but are not limited to:

**Government Departments, National and Provincial:**
- **Agriculture and Land Affairs** – responsible for rural development and land management
- **Arts & Culture** – the development of the economic potential of cultural activities
- **Education** – responsible for the provision of educational facilities and programmes
- **Environmental Affairs and Tourism** – the use and protection of natural resources, EIA’s, etc.
- **Health** – health service provision
- **Housing** – housing delivery policies and programmes
- **Provincial and Local Government** – integrated governance
- **Minerals and Energy** – energy efficiency, renewable energy and energy planning
- **Public Works** – management of state property and implementation of public works programme
- **Safety and Security** – prevention of crime, maintenance of public order
- **Social Development** – poverty reduction, social welfare, etc.
- **Sport and Recreation** – promotes participation in sport and recreation
- **Trade and Industry** – facilitates access to sustainable economic activity and employment for all through higher level of investment
- **Transport** – facilitates provision of an affordable, safe and sustainable transport system

**Water Affairs and Forestry** – ensures availability and supply of water

**Parastatals**
- Eskom, Telkom, Post Office, Transnet

**Private Sector**
- The Coega Development Co-operation and the local Chambers of Commerce and Industry (PERCCI, Comsec, NAF-COC), and the Mandela Bay Development Agency, are all local agencies that could play a role in sustainable community planning

**NGO’s and CBO’s**
- NGO’s such as the Urban Services Group, Development Action Group and Built Environment Support Group
- CBO’s – e.g. Bethelsdorp Development Trust, Helenvale Development Trust, Church Groups
### 4.6 The Integrated Development Matrix

An Integrated Development Matrix has been prepared that aims at facilitating the co-operation and co-ordination of the municipal departments and external actors in the planning and implementation process. While the matrix is generally applicable, it will also provide a basis for the more detailed communication programme.

The Matrix identifies the responsibilities of different municipal departments. It also deals with the role of provincial and national authorities and the involvement of private sector and community stakeholders. For the efficient use of the Matrix it is important that there are established procedures for meetings and for exchange of information.

#### Matrix

<table>
<thead>
<tr>
<th>Planning Framework</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDP/Spatial Development Framework</td>
<td>IDP Office</td>
</tr>
<tr>
<td>Intermediate Level Planning</td>
<td>Constituency Co-ordinator</td>
</tr>
<tr>
<td>Sustainable Community Plan/Structure Plan</td>
<td>Office of the Mayor</td>
</tr>
<tr>
<td>Town Planning Layout/Design</td>
<td>National Provincial</td>
</tr>
<tr>
<td>Decision to phase development</td>
<td>Private sector</td>
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<tr>
<td>Survey Peg</td>
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<tr>
<td>Implementation of engineering services</td>
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<tr>
<td>House design and construction</td>
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<tr>
<td>Develop public areas and facilities</td>
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<tr>
<td>Maintenance</td>
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<tr>
<td>Housing &amp; Land</td>
<td>HDFA</td>
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<tr>
<td>Infrastructure Engineering &amp; Electricity</td>
<td>HDEA</td>
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<tr>
<td>Health</td>
<td>HDPA</td>
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<tr>
<td>Environmental services</td>
<td>HDFA</td>
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<tr>
<td>Economic Development, Tourism &amp; Agriculture</td>
<td>HDEA</td>
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<tr>
<td>Sport, Culture &amp; Recreation</td>
<td>HDPA</td>
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<tr>
<td>Safety and Security</td>
<td>HDFA</td>
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<tr>
<td>Budget and Treasury</td>
<td>HDEA</td>
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<tr>
<td>Communication Office</td>
<td>HDPA</td>
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*In the matrix the responsibilities of each stakeholder are specified at each level of the planning framework*
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<tr>
<th><strong>Planning Framework</strong></th>
<th><strong>Housing &amp; Land</strong></th>
<th><strong>Infrastructure Engineering &amp; Electricity</strong></th>
<th><strong>Health</strong></th>
<th><strong>Environmental services</strong></th>
<th><strong>Economic Dev., Tourism &amp; Agriculture</strong></th>
<th><strong>Sport, Culture &amp; Recreation</strong></th>
<th><strong>Safety and Security</strong></th>
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<td><strong>Spatial Development Framework</strong></td>
<td>- Population forecasts</td>
<td>- Land requirements</td>
<td>- Growth directions</td>
<td>- Land availability</td>
<td>- SCU delineation</td>
<td>- Spatial development phasing</td>
<td>- 5/10 year housing plan needs</td>
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<tr>
<td><strong>Sustainable Community Planning/Intermediate Level Planning</strong></td>
<td>- Prepare preamble and plan program</td>
<td>- Establish steering committee and task team</td>
<td>- Present program to Council</td>
<td>- Co-ordinate participation and present to community</td>
<td>- Assess accessibility to local support centres</td>
<td>- Data collection</td>
<td>- Identify needs and co-ordinate sector needs</td>
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<td>Constituency Coordinator</td>
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<td>National Departments</td>
<td>Provincial Departments</td>
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<tr>
<td>Capital expenditure budget and forecast</td>
<td>Co-ordinate public consultation</td>
<td>Co-ordinate public consultation and input from Councillors and Ward Committees</td>
<td>Policy directives and info. on programmes in housing, education, welfare, health, transport</td>
<td>Departments of Transport, Housing, Health and Welfare, MCM</td>
<td>Policy directives and info. about programmes in housing, education, welfare, health/clinics provisions</td>
<td>Department of Transport, DPLG and Housing, Health and Welfare and Agriculture Consultation process; Implication assessment and co-ordination with provincial planning Approvals</td>
<td>Participation in process by providing information and expressing views Identifying needs</td>
</tr>
</tbody>
</table>

Co-ordination with capital expenditure budget and finance plan
Secure budget
Ensure inclusion in implementation program

Co-ordinate participation and present to community

Information about programmes and policies in housing, education, welfare, health/clinics, transport

Co-ordination with provincial development program in terms of housing, education, health/clinics, welfare
Incorporate proposals in provincial development and operational plans, Department of Education, Health and Welfare, DPLG and Housing, Finance

Participation in process
Providing information about plans and development programmes
Submitting comments
Incorporate proposals in business operational plans

SDF
Spatial Development Framework
MOSS
Metropolitan Open Space System
EIA
Environmental Impact Assessment
SEA
Strategic Environmental Assessment
SCP
Sustainable Community Plan
EMS
Environmental Management Strategy
NGO
Non-Governmental Organisation
CBO
Community Based Organisation
<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Planning Framework</th>
<th>Housing &amp; Land</th>
<th>Infrastructure Engineering &amp; Electricity</th>
<th>Health</th>
<th>Environmental services</th>
<th>Economic Dev, Tourism &amp; Agriculture</th>
<th>Sport, Culture &amp; Recreation</th>
<th>Safety and Security</th>
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</thead>
<tbody>
<tr>
<td><strong>Town Planning Layout/Design</strong></td>
<td>Planning and co-ordination of design process</td>
<td>Satisfy need for integration mixed unit types, erf sizes and socio-economic groups – some residential erven for sale?</td>
<td>Community involvement</td>
<td>Review/apply standards for the provision of services</td>
<td>Technical design and cost</td>
<td>Test layout options vs cost – engineering efficiency formula</td>
<td>Transportation – public/private efficiency and availability</td>
<td>Access to facilities eg. police, parks, clinics, community facilities, schools</td>
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<tr>
<td><strong>Decision to phase development</strong></td>
<td>Co-ordination need</td>
<td>Cost implications from servicing point of view</td>
<td>Access to facilities</td>
<td>Acquire funding on maintenance budgets</td>
<td>Access to facilities (to inform phasing)</td>
<td>Access to facilities</td>
<td>Access to facilities</td>
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<tr>
<td><strong>Survey Peg</strong></td>
<td>Co-ordination</td>
<td>Bush clearing</td>
<td>Soil erosion</td>
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<td><strong>Implementation of engineering services</strong></td>
<td>PHP (People's Housing Process)</td>
<td>Co-ordination to avoid waste eg, digging up trenches for each service separately</td>
<td>EMS</td>
<td>Advice, support &amp; development of local labour (training)</td>
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<tr>
<td><strong>House design and construction</strong></td>
<td>Placing house on site design – streetscape PHP</td>
<td>House quality House design</td>
<td>Develop parks simultaneously with houses i.e. use top soil from new roadways etc.</td>
<td>Advise on design to facilitate economic activity, and on positioning of unit/s on stands (for eg. to accommodate food gardening)</td>
<td>Support &amp; development of local labour</td>
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<td><strong>Develop public areas and facilities</strong></td>
<td>Timeous liaison with non metro providers: police, province, post office, bus etc.</td>
<td>Prioritise certain needs for development</td>
<td>Prioritise areas for development</td>
<td>Market business/ commercial and industrial land</td>
<td>Develop sports facilities</td>
<td>Police, fire and emergency</td>
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<td><strong>Maintenance</strong></td>
<td>Facilitate repairs, maintenance in conjunction with developers, contractors</td>
<td>Develop maintenance plans</td>
<td>Develop maintenance plans</td>
<td>Develop maintenance plans</td>
<td>Continuous support</td>
<td>Develop community maintenance programmes</td>
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<tr>
<td>Identify funding sources</td>
<td>Be aware of financial implications</td>
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<td>Other funding sources</td>
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<td></td>
<td>Employment of local community Skills transfer</td>
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</tr>
</tbody>
</table>
REFERENCES

References – funding and related assistance

- Municipal Infrastructure Investment Unit
  www.miiu.org.za
  Innovative solutions to municipal finance and management of services (water, sanitation, waste, energy, transport, etc.)

- IDASA
  www.idasa.org.za
  Education and training to empower local councils and communities for effective and accountable Local Government

- National Business Initiative
  www.nbi.org.za
  LED and effective governance for Local Government

- Hologram
  www.hologram.org.za
  Joint Action SALGA, DPLG, USAID on learning research and sharing across municipal sector

- SALGA
  www.salga.org.za

- National Department of Housing
  www.housing.gov.za

- National Housing Finance Corporation (NHFC)
  www.nhfc.co.za
At the sustainable community level, objectives concern the community more directly, the issues are more concrete and it is possible to influence development.

5 Community and Stakeholder Participation

Sustainable Community Unit or intermediate planning is the first level in terms of scale at which meaningful and direct community participation is both possible and necessary. At the Spatial Development Framework level the focus is on the vision and general municipal planning issues and the effect on communities may be less obvious. In the detailed planning stage the conditions for development are already established and substantial changes may be costly. At the Sustainable Community Unit level the objectives concern the community more directly, the issues are more concrete and it is possible to influence development. Community and stakeholder involvement at this level of planning will facilitate detailed planning and project implementation.
5.1 Community Participation
Community and stakeholder participation is essential throughout the planning and implementation process, and a communication strategy is needed to inform and engage the community, the politicians and the municipal administration. Involvement of people directly affected by planning proposals should begin in the initial planning stages.

Ward committees and development forums representing community organisations and stakeholders with specific interests such as the business sector, landowners and service providers should be included. Information meetings and hearings in the early stages of the process serve to:
• present the intention to prepare a spatial plan
• share the municipal vision, development principles and goals
• hear community needs, aspirations and priorities
• describe the process, including community participation

Later in the planning process the results of surveys, identification of issues, alternative solutions, planning scenarios, the implementation programme and cost implications are presented and discussed.

5.2 Stakeholder Involvement
The community is the primary stakeholder group, but other stakeholders with specialised capacities and responsibilities are essential. The identification of relevant stakeholders should be done during the early stages of the Programming Phase. Early contacts will contribute to identification of issues and priorities. Stakeholder involvement is particularly important when interest groups are expected to play an active role in the implementation process and in operation and maintenance.

Stakeholder participation requires commitment, transparency in the process, acknowledgment of alternative views, ideas, time and human resources. Properly handled, participation contributes to consensus and acceptance of proposals and will facilitate implementation.

The involvement of organised, representative stakeholder groups facilitates communication and participation. However, some may be better organised and resourced than others and exert undue influence, which must be balanced by public sector representatives. The community in an area may not be homogeneous, but may consist of numerous groups and stakeholders with different perspectives, aspirations, and interests. Some problems and solutions may be easy to agree upon, but there may be opposing views and interests.

There is always a need for compromises, and the municipality is responsible for final decisions and plans, guided by sound development principles and policies and advised by a steering committee representing all key stakeholders.

Benefits of community participation
• assists in formulation of goals and objectives
• ensures that community issues and concerns are taken into account
• generates a feeling of ownership of the plan amongst inhabitants
• enables communities to express their needs, aspirations, priorities and preferences
• facilitates formulation of planning proposals and implementation programmes that are supported by the community
• creates a better understanding of the development process and encourage the community to meet challenges and use opportunities for active involvement in local initiatives
• achieves consensus on priorities regarding projects and development programmes.

GLOSSARY
aspirations
what people hope to achieve
homogeneous
all the same
stakeholder
anyone involved and having a direct interest
5.3 Participants in the Planning Process

The community and stakeholder participation process involves a variety of actors with different roles and responsibilities in the planning and implementation phases:

- decision makers
- plan preparation and co-ordinating teams
- the community
- implementing agencies (including contractors)
- supporting agencies

These actors participate via the steering committee and task team and can participate in development forum, ward committee and project meetings and workshops.

Community participation and decision making in the Planning and Implementation Process

[Diagram showing the planning and implementation process for Plan Initiative, Planning Preamble, Planning Programme, Planning, Implementation, and various steps such as Formulation of Proposals, Plan Preparation, Plan Approval, Detailed Development Planning Schedule, Implementation Programme, Action Plans, Cost Estimates and Funding, Institutional Requirements, Stakeholder Roles and Responsibilities, Community Participation Process, Co-ordination of Inputs of Stakeholders, Monitoring and Review Plan.]
Masithetisane = Come, let’s talk together
Decision makers
The decision makers are involved throughout the process, from approving the Plan Initiative through to deciding implementation contracts. Council, subcommittees and municipal units are the main actors. The steering committee facilitates the planning process and prepares and supports key decisions such as approval of:
- the Plan Initiative
- the Plan Programme and Work Programme
- the goals, objectives and issues
- the Plan (plan proposals)
- the Implementation Programme

Plan preparation agencies
Plan preparation is the responsibility of the lead municipal department via the planning team which works with and co-ordinates the task team. Aspects of plan preparation can involve working groups of key officials and consultants in:
- Land/urban planning
- Housing
- Transport Planning
- Economic Affairs
- Environmental Services
- Infrastructure Engineering
- the IDP Unit
- Provincial departments
- Consultant organisations

The community
Beneficiaries can contribute to planning and implementation to the extent that their involvement is planned in the communication programme and enabled by effective communication and participatory methods. Local organisations and individuals may also be beneficiaries, if involved in construction, maintenance and service projects that receive funding or contracts, and pay for local work.

The community should be involved throughout the planning and implementation process. Methods will vary depending upon the purpose and practicalities. In the initial period the verification of objectives and the identification of issues and priorities are sought, while in the planning phase and implementation programming consensus and mobilisation of stakeholders are expected.

Ward councillors and committees
A Sustainable Community Unit may include a number of wards, and all ward councillors must participate in the planning process. Ward councillors need to:
- share information with organisations in their wards
- represent the needs of stakeholders
- liaise with other ward councillors and municipal officials regarding development needs and project priorities
- keep the community informed on development issues and the planning process and outcomes
Development fora
In communities where the structure and variety of interest groups and stakeholder organisations is complex and difficult to co-ordinate, it is appropriate to establish a development forum to facilitate communication, consultation and participation of other organisations and groupings. Fora should include councillors and representatives of all significant community organisations and stakeholder groups in the area.

Implementing agencies
Implementing agencies include municipal and provincial departments and private sector and community based contractors. Technical departments such as infrastructure engineering, environment and waste management have their own implementation programmes and projects, and co-operation and co-ordination is crucial. The IDP Unit and Finance Department have a key role to play in co-ordinating resource allocation and project budgets.

Investors, financing institutions and contractors are stakeholders during implementation, and the communication programme must ensure that they understand and support the vision, principles and quality standards of the project.

Supporting actors and agencies
The steering committee plays an overall supporting and monitoring role. Other supporting actors such as technical departments and consultants assist the planning team and task team with investigations, studies, surveys, data collection, analysis and assessments, plan preparation and implementation. At community level, ward and street committees, NGOs, CBOs and the development forum can contribute.

Provincial and national agencies that support and finance housing and infrastructure projects, or provide specific services, will provide information and assess needs in their sectors.

Supporting actors, authorities and agencies:
- steering committee
- ward committees
- street committees
- development forum
- provincial departments
- national agencies
- technical departments
- consultants
- NGOs and CBOs
- ESKOM

Stakeholders in the planning process
CHAPTER 5 – PARTICIPATION

5.4 Communication Strategy and Programme

Municipal, provincial and national departments and other stakeholders need to receive information throughout the process. The communication strategy provides the process and means for effective communication, consultation, participation and co-operation. It specifies the stakeholders, and how they are involved in and contribute to the process. The Integrated Development Matrix is a useful tool for mapping co-operation and communication among municipal departments. (see chapter 4 page 112)

The communication programme is planned at the start of the planning and implementation process. It identifies target groups and their representation, communication methods, and the nature and timing of key communication events and activities in the process. The communication programme can be presented to the decision makers for approval and to gain their commitment.

Communication methods

The communication strategy includes different methods depending on the target group and the stage of the process at which the communication activity will occur. The methods are:

- Dissemination of information
- Consultation
- Participation
- Mobilisation

Dissemination of information

Dissemination of information enables participants and stakeholders to understand the content and consequences of the planning programme and proposals. Methods and presentations must be designed to reach particular target groups, and should include direct contact. Dissemination of information is particularly relevant in the initial stages of the process, when specific results of studies and analysis become available, and on completion of the planning process.

Consultation

Consultation should not be limited to the legally required minimum of calls for comments and submissions, as fuller consultation and participation via interactive sessions allows communities and other stakeholder to engage with, contribute to and influence decision making to a greater extent. Consultation may be general or focus on specific issues, but must be based on adequate prior dissemination of information.

Participation

Participation means active involvement to obtain views and constructive inputs from those affected by and involved in the planning, to achieve an understanding of, contributions to and acceptance of proposals. The ideal is that communities become partners in the process of planning their own development.
Mobilisation
Mobilisation entails involvement in planning, implementing, maintaining and evaluating housing, infrastructure, services and the environment. Shared responsibility leads to community development, organisation, responsibility and co-operation. Mobilisation requires enhanced communication, municipal involvement, support and monitoring.

Communication strategy management
Communication strategy management is the responsibility of the project planning team together with relevant political committees. The steering committee, task team, development forum, or other local or contracted organisations can participate in managing aspects of the communication programme. A schedule for communication should be established by the planning team and steering committee, based on planning process phases, key steps and decision points.

The Integrated Development Matrix is an essential tool for the communication strategy management (see chapter 4).

Communication programme in different planning phases
The programme for communication will be prepared at the commencement of the planning period and should cover the entire planning and implementation process. It should identify the means and methods to be used, timing of events in relation to the process and timing of planning inputs, target groups and their representation. The major events in the programme should be identified. The programme for communication should be presented to the decision makers for acceptance and confirmation of commitment. The content and methods used may vary over time and this should be described in the programme.

Communication in the Programming Phase
Already at the Plan Initiative Stage, planners interact with other municipal departments. A joint task-team facilitates co-operation, exchange of information and active input in plan preparation, while politicians are involved through council, sector sub-committees or on the steering committee.

Initial community and stakeholder communication focuses on introducing the planning project and proposed communication mechanisms, using structures such as ward committees and local forums. In some situations it is appropriate to establish a consultative development forum to facilitate communication with diverse groups.

If a baseline study or area-specific investigations are required, methods that involve the community and encourage active participation are relevant. Results should then be presented to all stakeholders, and used as a basis for agreeing goals and objectives. It is not practical to involve entire communities, but rather representative organisations and structures. However, information on the project and the results of this consultation can be distributed more widely.

The planning team should, in this initial stage, organise a workshop to agree on the plan programme, roles and distribution of tasks, methods and
means for co-operation and co-ordination. Participants include:
• relevant municipal departments
• the task team
• steering committee
• representatives of ward committees in the area
• ward councillors
• portfolio councillors
• community representatives
• key stakeholder representatives

**Communication in the Planning Phase**

The planning phase is the most intensive period, also for communication with stakeholders, community representatives and interest groups. Content may often be technical, but must be presented in a way that can be easily comprehended and discussed.

The planning team is responsible for project management, including the communication programme, and involving members of the task team in planning work. Consultation with relevant municipal departments and provincial and national agencies is essential to incorporate their programmes, projects and requirements in the plan proposals. Regular meetings with the steering committee and community representatives must be scheduled to present findings and planning scenarios, and verify issues and priorities.

The Initial Planning Stage includes a start-up meeting involving all stakeholders, at which the communication and participation programme is agreed. Representatives decide on how best to distribute information from the start-up meeting to their organisations.

On-site visits by groups of stakeholders are an effective way to present, illustrate and discuss issues and aspects of a Sustainable Community Unit plan. The planning team has direct contact with community representatives, and a local site office facilitates communication.

During this stage the work group and task team consult and co-operate intensively with different municipal units to align the spatial planning with sector plans and other development projects.

Plan Preparation including formulation of scenarios, alternative solutions and impact assessments involves the work group, task team, steering committee and development forum, ward committees and specific interest groups. Formulation of Plan Proposals and Plan Approval requires that views and comments are submitted by all stakeholders.

**Communication in the Implementation Phase**

The links between planning and implementation processes in sustainable community planning and the communication programme prepare for community involvement in implementation. The range and number of stakeholder groups may now increase, as local initiatives and local management become part of the process.

The communication programme needs to be monitored and adapted over the relatively long period of implementation. However, the steering committee, ward committees, development forum, project management and task teams can continue to function.
The implementation period starts with a workshop to clarify the activities, responsibilities and co-ordination of the programme. Community involvement and direct contact with local groups intensifies as the focus shifts to detailed planning, housing provision and service facilities.

Communication with provincial and financing agencies and service providers is crucial for efficient implementation. In the municipality, linkages between implementation, the financial plan and budget management need to be established in the communication programme.

<table>
<thead>
<tr>
<th>Process stage</th>
<th>Council Steering Committee</th>
<th>Municipal units</th>
<th>Community Stakeholders</th>
<th>Other govt. agencies</th>
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<tr>
<td>Programming</td>
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<td>Plan Initiative</td>
<td>Consultation</td>
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<td>Preamble</td>
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<tr>
<td>Planning Programme Proposal</td>
<td>Approval</td>
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<td>Planning</td>
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<td>Initial planning</td>
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<tr>
<td>Planning analysis and assessment</td>
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<td>Participation</td>
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<tr>
<td>Alternative proposals and scenarios</td>
<td>Consultation</td>
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<td>Plan Proposal</td>
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<td>Plan Approval</td>
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<tr>
<td>Detailed planning Implementation programme</td>
<td>Consultation</td>
<td>Consultation</td>
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<td>Approval</td>
<td>Consultation</td>
<td>Consultation</td>
<td>Mobilisation</td>
</tr>
</tbody>
</table>

**Aspects of the implementation programme**
- specific development projects
- housing delivery programme
- infrastructure development programme
- service provision programmes
- community based maintenance

"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody."

Jane Jacobs

INDABA and UBUNTU – community newsletters are a useful means of communication in a community planning process.
Community representatives discuss plans on site with a smaller group of stakeholders

Masithisane at the stadium involving a large group of people
5.5 Learning and capacity building in the planning process

This guidebook will be useful to the extent that it is used. This section outlines possible ways to use the guide, and related learning and capacity building processes. This latter theme is the subject of an earlier guide *Developing Learning Opportunities in the CUP (Comprehensive Urban Planning) Process in Kimberly and Port Elizabeth 1998*, which can be referred to for more detail.

People inevitably and naturally learn and develop capacity when they participate in any challenging and complex process, particularly when others are involved. However, there is often a far greater potential for learning and developing capacity, if this is undertaken consciously. This is particularly relevant and necessary when undertaking new, challenging and innovative projects.

Every planning project is an opportunity for real learning and capacity development on the part of all those involved, which is a real benefit for committed participants. This should be a project objective that is articulated, planned for, monitored and managed. The core learning process is to use an action learning approach and to consciously manage learning, capacity development and ongoing improvement, using a variety of learning methods and resources.

Such learning should relate to both:

- **what** we are doing, or the content or subject – in this case sustainable community planning, and
- **how** we are doing, or our processes and interaction – management, communication, co-operation, sticking to schedules and budget, etc.

*Sources of learning in the planning process*

- **from our own experience**
  - past and current actions and practice – successes and mistakes

- **from others, directly**
  - learning visits, interaction, observation, presentations

- **with others**
  - discussing, experimenting, reviewing and evaluating plans and implementation (action learning)

- **structured learning**
  - courses of different lengths, training sessions and workshops

- **from others, indirectly**
  - reading guidebooks, case studies, websites, etc.

All these methods can be used in the context of a planning project.
Action learning

In real situations it is too late to wish for a better education, a higher qualification or more prior experience! The only option is to learn in and from the situation and from each other, and often this practical ‘on the job’ or action learning is most effective and efficient, as we learn what we need in practice, and we learn by doing. Implementation and feedback are far more immediate than in more structured and formal learning situations. People quickly learn how well what they have planned works, and from their successes and mistakes.

This is why pilot projects are a sensible approach – implement and test the plan on a small scale, then review, evaluate and learn from the pilot in order to improve the plans for the larger project.

Action learning as a method for continuous improvement is a general process that can be applied by all project teams and structures. It requires that planning, monitoring reviewing and evaluating are managed as an integrated process. This should be applied not only to the content of work, but also to the processes and interaction, both within and between groups.

Using the guide as a learning resource

Action learning is a powerful method for self-reliant and ongoing learning that can be applied by individuals, groups, whole projects and even organisations. However, other learning resources are important to supplement action learning, particularly for new and innovative undertakings such as sustainable community planning.

In such instances the experience and wisdom of others who have ‘gone ahead’ and pioneered the territory is an essential resource, that can help avoid many pitfalls and enable accelerated learning – we don’t have to repeat all the same experiments and mistakes when we can learn from the successes and failures of others. This of course is the purpose of a guidebook. But guidebooks only work to the extent that we study, refer to and learn from them, and relate their content to the actual situation in which we find ourselves.

Individual use

Individuals can and should be encouraged to read and use this guide as a reference and source for developing their own understanding and approach, in general and for particular aspects. This is relevant for all stakeholders.

Group or team use

Groups and structures involved in a project can use the guide as a common source of ideas, guidelines and learning. This will be enhanced by presentation and discussion of relevant aspects at appropriate stages of the project. There are many ideas and examples on spatial planning, concepts and diagrams that can help with planning of processes and participation, and lists that can be used as planning checklists, or for monitoring, reviewing and evaluating (e.g. the principles checklists at the end of sections on the six functional elements in chapter 3).

The guide also points the way to finding other best practice examples and learning resources.
An official project planning guide
A council or steering committee could make this the official guide for all spatial planning projects, or for a particular project. It is then essential that all key actors are familiar with the contents of the guide, as the source of the planning principles and approach.

Community Capacity Building in the Sustainable Communities Planning Process

Objectives
• Promote local participation and responsibility
• Promote Local Economic Development
• Promote interaction with civil society and private sector
• Promote administrative, political and fiscal decentralization
• Empower local civic society and particularly women in the development process
• Integrate statutory and non-statutory consultation processes rather than regard the former as more important.

How to enhance learning in the planning process
• Participation – involve people in the process and allow adequate time for consultation
• Promote delivery systems that involve the community in creating the new urban future rather than merely being recipients of the benefits.
• Programmes that enable participants to access economic opportunities and credit and to participate in pilot projects around immediate community needs, to sustain interest and commitment. Integrate SCU planning with other community development initiatives.
• Break participation into components that are easy to identify and group to expedite understanding
• Capacity building amongst municipal staff on sustainable communities planning
• Develop a comprehensive plan for community participation in all the various aspects of the project
• User friendly techniques, e.g. illustrations to promote understanding. Use local language and examples.
• Use familiar methods/techniques to disseminate information (radio, print, pamphlets, drama, loudhailers)
for your notes
Conclusion

Planning sustainable communities is clearly complex and involves:
- key development and planning principles
- various content areas and spatial elements
- a number of linked processes over a significant time period
- a network of participating actors and stakeholders.

This guide set out to clarify the above aspects, and to share a methodology to integrate and manage them, in order to plan and develop Sustainable Community Units with an improved quality of urban life. The intention has been to focus on essential elements and general processes that are likely to be relevant in different situations, without being prescriptive. Every project and situation is unique, and the guidelines may need to be adapted.

However, the key principles on which this planning approach is based are increasingly recognised as not only desirable but also necessary, both for creating more ideal urban living conditions and for reasons of sustainability. The challenge is to work towards realising these ideals in developing countries and communities characterised by poverty, a lack of resources and capacity, and significant inequalities. This requires high levels of commitment and co-operation, ongoing learning, innovative solutions and ongoing building of a range of capacity or competencies.

Sustainable development includes and integrates both the development of people and their situations and standards of living. Such development cannot be delivered to passive recipients – it needs to be done, and this requires active participation and a partnership approach.
The importance of sustainability and integration as overall development principles and goals has been stressed, and they need to guide all planning, decision making and implementation at all levels. Whether planning at the SDF, sustainable community or neighbourhood level, sustainability and integration are equally important and applicable – if the aim is better planning which results in better communities and built environments. Even small initiatives and projects can demonstrate best practices and have a significant impact, if these principles are taken seriously and are realized in practice. The real challenge is, however, to plan larger Sustainable Community Units in an integrated manner, as outlined in the guide.
Glossary

A

accessible
easy to get to

action learning
consciously learning from practice how to do better by reviewing, evaluating and re-planning

adjacent
next to

aesthetic
concerning beauty

affordable housing
housing for low income households, which is usually subsidized

allocation processes and criteria
the process whereby services, sites and houses are provided and the factors considered in deciding who will receive them

allotments
small individual garden plots in a communal garden area

alternative and sustainable technologies
technology that does less harm to the environment and uses renewal energy sources

artisan
someone practising a trade

aspirations
what people hope to achieve

assets
things owned that have significant economic value

B

built environment
the urban environment including buildings, open spaces and infrastructure

baseline survey
survey providing initial data against which future development is measured

balanced urban structures
areas with a balance of different uses (residential, services, economic activities and recreation) and of built and green environments

Batho Pele means ‘Putting people first’
A government initiative to enhance the quality and accessibility of services by improving efficiency and accountability to the recipients of public goods and services

benchmarks
points in the process when specific things must be achieved

biodiversity
variety of species of plants and animals

biomes
areas with specific natural vegetation
biodiversity hotspots
areas with unique and endangered species of animals and plants

capacity building
developing the skills and abilities of people, groups or organisations

CBD
Central business district of a city or town

CBO
community based organisation

caracter
unique qualities

chicane
narrowed section of a street

clean production
the production of goods and services processing less waste, or none at all, and that do not use toxic man-made chemicals

cluster layouts
cluster housing where vehicle access and/or speeds are limited

coaching
helping people improve their performance by facilitating reviewing, evaluating and planning, and by giving feedback and advice

community fabric
that which characterises and binds a community together

compliance
acting in accordance with a law or regulation

conservation
protection of nature

consultation
asking for comments and feedback on proposals and plans

corridor development
denralised development along major routes where mobility, accessibility and the provision of public transport concur

delineation
definition of boundaries

demography
population profile/data

densification
increasing the number of residential or other units per specified area, e.g. by building adjoining units, multi-storey buildings and having smaller plots

development principles
key values that guide development

disparities
differences causing inequalities

dissemination
distribution or communication of information

dormitory
place for sleeping for many people

dominical
in harmony with nature and the environment

economic integration
integrating marginalised groups into the mainstream economy

economic sustainability
the ability of an area or community to earn income in order to cover its costs on an ongoing basis

efficient development
urban 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

energy conservation
using less energy

entrepreneur
person who starts and develops a business or organisation

entrepreneur development
training and support for entrepreneurs

Environmental Impact Assessment
a legally required study to determine and to prevent or reduce potential harmful effects of a development project on the environment

environmental sustainability
the ability of an environment and its key natural processes to continue to function in a healthy manner

erven
plural of erf – a demarcated site or stand

Expanded Public Works Programme (EPWP)
a government programme to provide work opportunities coupled with training, covering all spheres of government and state-owned enterprises

fauna
animals of all types

feeder buses
local buses taking people to main bus routes or stations

floristic region
region with specific types of plants

food security
having enough food on a sustained basis

functional integration
different functions such as living, working and recreation in the same area

gender equality
men and woman are treated the same

gender equity
equal representation of men and women in terms of numbers

GIS
Geographic Information System – computer-based mapping and data information system

green fields development
new development on previously unused land

green procurement
using products and services that create minimum waste and pollution in production and that use eco-friendly, biodegradable materials

grey water
household waste water from sinks, basins and baths

hierarchy
a system with higher and lower levels

homogeneous
all the same

Imbizo
a consultation meeting

imperatives
things that must be done

incubation
start up support for a small business

infill development
building in developed urban areas on properties that are not developed, in order to optimise the use and provision of services

informal economic activity
unregistered and untaxed economic activities
integrate
combine and harmonise different functions and/or groups

**Integrated Development Plan (IDP)**
an overall municipal development plan required by the Municipal Systems Act, Act 32 of 2000, which guides decision making, budgeting and development

integration
bringing together of things such as economies, functions, cultures, or different groups or communities

**intermediate level planning**
planning at the level between that of the whole town or city and the local neighbourhood, i.e. the suburb or SCU

**land use management**
management of how land is used in an area

land use management system (LUMS)
a working document that governs development in an area

land use management plan
shows the location of various land uses

landscaping
shaping and design of a garden or open space

legibility
expression of identity and character in physical

livelihood
the means whereby people live or make a living

**Local Agenda 21**
the United Nations international local governments programme for environmental sustainability in the 21st century

**local economic development (LED)**
development of local production, service provision, trade and consumption

local infiltration
disposal of waste water into the surrounding soil

maneuvrability
ability to move about easily

mentor
a person with experience who helps others to succeed

mentoring
guiding the development of another

**Metropolitan Open Space System (MOSS)**
links together important open spaces and emphasizes their importance in the urban framework for environmental, social, economic, recreational and aesthetic reasons

mixed density
area with different densities

mixed use development
mixes different functions such as business, residential and community facilities

**MK**
Mkhonto we Sizwe – Spear of the Nation – the armed wing of the ANC, 1961–1994

mobilisation
motivating people to participate

mono functional
single function

monotony
boring repetition

multi-modal
with many different types or methods

mural
painting on a wall

naked streets
streets without traffic signals, signs, sidewalks, markers, speed bumps, or even curbs. This makes motorists drive more slowly and be more cautious, thus reducing accidents.

NGO
non-governmental organisation

NMBM
Nelsson Mandela Bay Municipality

non-renewable resources
natural resources that cannot be replaced once used, e.g. oil, coal, natural gas, natural forests

open space
public or private land used for parks, gardens, playgrounds, recreation and sport

optimise
make as much as possible

organic gardening
uses only natural compost and substances to increase soil fertility and control pests, diseases and weeds

participation
active involvement in planning

pedestrian movement
walking

peripheral
on the outer edge

**plan initiative**
initial outline proposal

**planning preamble**
a comprehensive planning background description

**planning principles**
values that guide planning

plaque
metal name or information plates in public places

poverty alleviation
creates opportunities for people to earn money and take care of themselves

precinct
area within the boundaries of a building or complex of buildings

**principles**
values and ideas that guide action and behaviour

prioritisation
deciding which items or issues are more important than others

programming
preparatory planning

public-private partnership
formal cooperation between government and business

radial
going out from the centre

recreation
non-work activities that are healthy and regenerating

replication
repeating the same activity elsewhere

residential density
the number of living units per specific area of land

scenarios
different possible future situations or options
sector plans
plans for different functions, e.g. housing, transport, water services, economic development and the environment

segregation
separation of people, usually on a racial, ethnic or religious basis

servitude
right of access on property e.g. for a pipe line or an access road

set-backs
positioning of houses in relation to the street

social integration
integration of minority groups, ethnic minorities, refugees, underprivileged or disadvantaged groups into the mainstream of the society, enabling their access to opportunities, rights and services available to others

social services
services provided by government to ensure the welfare of those in need

social sustainability
the ability of a community to co-operate and develop

solar power
the heat of the sun used to heat water or generate electricity

Spatial Development Framework
an overall plan for the physical structuring and development of a municipal area

spatial planning
planning of physical space, layouts and land use in urban or town planning

special needs group
groups who are disadvantaged in one way or another

spheres of life
cultural, political, social, economic and private

stakeholders
all groups involved or with a direct interest in a project or organisation

streetscape
the design and appearance of a street

surveillance
watching/keeping watch over

sustainable
capable of being sustained; able to continue with minimal long-term harmful effect on the environment, e.g. sustainable agriculture

Sustainable Community Units (SCUs)
planning areas of a size defined by accessibility of services within a maximum walking distance of 2 km or 30 minutes. Intermediate level urban planning units.

tenure
legal right of use, e.g. ownership or renting

thermal
relating to heat

topography
the character of the land with its geographic features

town planning scheme
a legal document relating to property that defines land uses and processes for the change of land use. It is intended to co-ordinate the harmonious development of an area in a way that promotes health, safety, good order, amenities, convenience and general welfare, as well as efficiency and economy in the process of development.

townscape
urban environment as opposed to landscape

ubuntu
collective solidarity based on values of, respect, compassion and humanity

urban agriculture
home, community and institutional food gardens and small-scale animal husbandry in urban areas

urban edge/urban fence
defined boundary of urban development within a town or city

urban living environment
areas where people live in towns and cities

urban renewal
re-development and upgrading existing areas

urban sprawl
inefficient land use that extends the urban edge

verge
area between the road and the erf boundary/side-walk/pavement

verification
approval as valid

walking bus
a group of children who walk together to or from school as a unit, guided by a few adults

water-wise gardening
uses grey water or other recycled water and indigenous plants that need less water

wind power
electricity generated by wind-driven generators or turbines

woonerf
a street or area where pedestrians and cyclists have priority over motorised traffic. These shared streets are designed to limit traffic speeds.

zoning
defines the purposes for which land may be used