



NC PSDF TOOLKIT 11 | STRUCTURING ELEMENTS FOR SDF DEVELOPMENT



Province of the
Northern Cape
REPUBLIC OF SOUTH AFRICA

STRUCTURING ELEMENTS GUIDELINE TOOLKIT

The Northern Cape PSDF Toolkit provides a set of guidelines and tools designed to guide spatial planning at both regional and local levels, ensuring that development is sustainable, efficient, and aligned with the broader national spatial strategies, including the NSDF. The toolkit emphasizes the importance of structuring elements that guide urban and rural development, connectivity, and conservation efforts across the province.

TOOLKIT INTENT

This Toolkit is to be Used to:

- Maintain clear urban-rural boundaries to control urban sprawl and support infrastructure alignment.
- Strengthen transportation, economic integration, and sustainable service provision between urban and rural areas.
- Protect rural landscapes, promote ecosystems, and establish buffer zones.
- Enhance infrastructure and economic synergies between significant rural centres.
- Improve local connectivity and support small-scale enterprises in smaller rural settlements.
- Implement sustainable management, biodiversity conservation, and community involvement in protected zones.
- Promote integrated planning with mixed land uses, community amenities, and sustainable design.
- Encourage high-density, accessible development with concentrated services and vibrant public spaces.
- Foster mixed-use development along transport routes with economic opportunities and environmental considerations.
- Prioritize pedestrian movement, support local businesses, and create vibrant, community-focused streetscapes.
- Ensure connected, accessible green spaces with biodiversity protection and sustainable management.

COPYRIGHT, DATA, AND DATA USE DISCLAIMERS

The Northern Cape Provincial Spatial Development Framework (PSDF) is the intellectual property of the Northern Cape Office of the Premier, the Department of Agriculture, Land Reform and Rural Development (DALRRD), and the Maswana Group of Companies.

While every effort has been made to ensure the accuracy and reliability of the data and information within the TOOLKIT, the Northern Cape Office of the Premier, DALRRD, and the Maswana Group of Companies do not guarantee the completeness or accuracy of the data and information. Users are advised to verify the information independently before making any decisions based on the data or information provided.

CONTENTS

1	INTRODUCTION.....	3
1.1	Application of spatial structuring elements on a regional and local level.....	3
1.1.1	Regional spatial structuring elements and guidelines.....	3
1.1.2	Local and Settlement Level Planning Guidelines.....	5

1 INTRODUCTION

The Toolkit for Structuring Elements Guidelines is designed to support the implementation of the Northern Cape Provincial Spatial Development Framework (PSDF) by providing practical, clear, and actionable guidelines for spatial planning at both regional and local levels. It emphasizes the need for structured and balanced development across urban, peri-urban, and rural areas, ensuring that growth is sustainable, equitable, and aligned with the overarching goals of the PSDF.

This Toolkit serves as a resource for planners, municipalities, and stakeholders involved in spatial development, guiding the application of critical structuring elements such as urban edges, rural linkages, and conservation areas. By adopting these guidelines, users can ensure that spatial planning efforts contribute to the efficient use of land, the protection of natural resources, and the enhancement of community well-being across the Northern Cape.

1.1 APPLICATION OF SPATIAL STRUCTURING ELEMENTS ON A REGIONAL AND LOCAL LEVEL

1.1.1 Regional spatial structuring elements and guidelines.

The NSDF highlights the need and rationale to ensure the productivity of rural landscapes by introducing the Regional-Rural Development model, illustrated by the figure below.

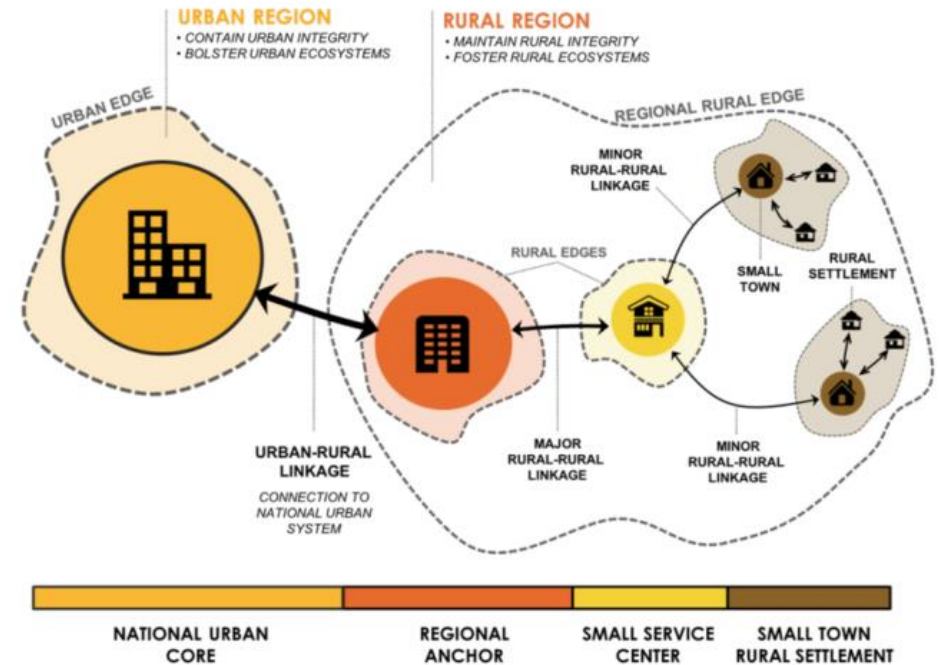


Figure 1: NSDF Regional-Rural Development Model

The following structuring elements are crucial for district and regional spatial planning:

1.1.1.1 Urban Edge

Definition: The boundary defining the limit of urban development, separating urban areas from rural and natural landscapes.

Guidelines:

- **Contain Urban Integrity:** Ensure urban development does not sprawl into rural areas, maintaining a clear distinction between urban and rural zones.
- **Bolster Urban Ecosystems:** Enhance green spaces within urban areas to support biodiversity and provide recreational spaces for residents.

- **Manage Growth:** Control urban expansion through zoning laws and development policies that prioritize vertical growth over horizontal sprawl.
- **Infrastructure Planning:** Align infrastructure development with the urban edge to ensure efficient service delivery and minimize environmental impact.

1.1.1.2 Urban-Rural Linkages

Definition: Connections facilitating the flow of people, goods, services, and information between urban and rural areas.

Guidelines:

- **Enhance Connectivity:** Develop and maintain efficient transportation networks linking urban and rural regions.
- **Economic Integration:** Promote economic activities that benefit both urban and rural communities, such as agricultural markets and tourism.
- **Service Provision:** Ensure access to essential services like healthcare, education, and utilities in rural areas through urban-rural collaboration.
- **Sustainable Development:** Encourage practices that foster economic growth without compromising environmental sustainability in both urban and rural areas.

1.1.1.3 Rural Edges

Definition: Transitional zones between urbanized regions and purely rural or natural areas.

Guidelines:

- **Maintain Rural Integrity:** Protect rural landscapes from encroaching urban development.
- **Foster Rural Ecosystems:** Support agricultural and ecological activities that sustain rural livelihoods and biodiversity.
- **Buffer Zones:** Establish buffer zones to mitigate the impact of urban activities on rural environments.

- **Community Involvement:** Engage rural communities in planning processes to ensure their needs and perspectives are considered.

1.1.1.4 Major Rural-Rural Linkages

Definition: Primary connections between significant rural centres, facilitating movement and economic exchanges.

Guidelines:

- **Infrastructure Development:** Invest in robust transportation and communication infrastructure to connect major rural centres.
- **Economic Synergies:** Promote collaborative economic projects that leverage the strengths of different rural areas.
- **Resource Sharing:** Facilitate the sharing of resources and services, such as agricultural cooperatives and shared marketplaces.
- **Cultural Exchange:** Encourage cultural and social exchanges to strengthen regional identity and cooperation.

1.1.1.5 Minor Rural-Rural Linkages

Definition: Secondary connections between smaller rural settlements and service centres.

Guidelines:

- **Local Connectivity:** Develop local roads and pathways to improve accessibility between smaller settlements.
- **Service Networks:** Create networks for the distribution of services like education, healthcare, and utilities to smaller communities.
- **Support Small Enterprises:** Foster small-scale economic activities that benefit from proximity to other rural settlements.
- **Community Support:** Strengthen local institutions and support systems to enhance the resilience of smaller rural communities.

1.1.1.6 Conservation and Protected Areas

Definition: Zones designated for the protection of natural environments, biodiversity, and cultural heritage.

Guidelines:

- **Sustainable Management:** Implement management practices that preserve ecological integrity while allowing for sustainable use.
- **Biodiversity Conservation:** Prioritize the protection of habitats and species through conservation programs and initiatives.
- **Community Involvement:** Involve local communities in conservation efforts to ensure their support and benefit from protected areas.
- **Education and Awareness:** Promote environmental education and awareness programs to foster a culture of conservation.
- **Legal Protection:** Establish and enforce legal frameworks that safeguard conservation and protected areas from harmful activities.

These guidelines provide the foundation of regional and district and regional spatial planning to ensure urban, peri-urban and rural areas function optimally.

1.1.2 Local and Settlement Level Planning Guidelines

On a local and settlement level the structural elements are more detailed. This section must be read in conjunction with the Toolkit on Social Services for the Northern Cape-specific adaptation of social service hierarchies and distance parameters.

1.1.2.1 Urban Edge (5, 10, and 15-year boundaries)

Definition: Planned boundaries defining the extent of urban growth for 5, 10, and 15-year periods.

Guidelines:

- **Short-Term (5-year):**
 - **Immediate Growth Control:** Enforce strict zoning regulations to manage short-term urban expansion.
 - **Infrastructure Development:** Focus on improving existing infrastructure and services within the 5-year boundary.
 - **Monitoring and Evaluation:** Regularly review and adjust plans based on population growth and urbanization trends.

→ Mid-Term (10-year):

- **Planned Expansion:** Designate areas for phased urban growth, ensuring sustainable development practices.
- **Resource Allocation:** Plan for the allocation of resources and services to support mid-term expansion.
- **Community Involvement:** Engage with local communities in planning and decision-making processes.

→ Long-Term (15-year):

- **Future-Proofing:** Anticipate future needs and potential challenges, integrating resilience planning.
- **Environmental Protection:** Ensure long-term boundaries do not encroach on critical natural habitats and agricultural lands.
- **Strategic Investments:** Invest in strategic infrastructure projects that align with long-term growth plans.

1.1.2.2 Precinct

Definition: A distinct urban area with specific land uses and characteristics.

Guidelines:

- **Integrated Planning:** Ensure precincts are planned with mixed land uses, integrating residential, commercial, and recreational spaces.
- **Community Amenities:** Provide adequate community amenities such as parks, schools, and healthcare facilities.
- **Transport Connectivity:** Design precincts with efficient public transport links and pedestrian-friendly pathways.
- **Sustainable Design:** Promote sustainable building practices and green infrastructure within precincts.

1.1.2.3 Node

Definition: A focal point of activity, often characterized by higher density and a mix of uses.

Guidelines:

- **High-Density Development:** Encourage higher-density development to maximize land use efficiency.
- **Accessibility:** Ensure nodes are highly accessible by various modes of transport, including public transit, walking, and cycling.
- **Service Concentration:** Concentrate essential services and amenities within nodes to support the local population.
- **Vibrant Public Spaces:** Develop vibrant public spaces within nodes to foster community interaction and engagement.

1.1.2.4 Activity Corridor

Definition: A linear area along major transport routes characterized by a concentration of mixed-use activities.

Guidelines:

- **Mixed-Use Development:** Promote mixed-use development along activity corridors to support a diverse range of activities.
- **Transport-Oriented Design:** Ensure activity corridors are designed to prioritize public transport, cycling, and pedestrian movement.
- **Economic Opportunities:** Create economic opportunities by encouraging commercial and retail development along corridors.
- **Environmental Considerations:** Integrate green spaces and sustainable urban design practices within activity corridors.

1.1.2.5 Activity Street

Definition: Streets that are the focus of local commercial and social activities.

Guidelines:

- **Pedestrian Priority:** Design activity streets to prioritize pedestrian movement and safety.
- **Vibrant Streetscape:** Encourage vibrant and engaging streetscapes with active frontages, outdoor seating, and street art.
- **Local Businesses:** Support local businesses through favourable zoning and infrastructure improvements.

- **Community Events:** Facilitate community events and markets to enhance the social and economic vitality of activity streets.

1.1.2.6 Municipal Open Space System

Definition: A network of parks, green spaces, and natural areas within the municipality.

Guidelines:

- **Connectivity:** Ensure open spaces are interconnected through green corridors and pedestrian pathways.
- **Accessibility:** Provide equitable access to open spaces for all community members.
- **Biodiversity Protection:** Protect and enhance biodiversity within municipal open spaces.
- **Recreational Facilities:** Develop diverse recreational facilities to cater to different age groups and interests.
- **Sustainable Management:** Implement sustainable management practices for the maintenance and conservation of open spaces.
- **Community Involvement:** Engage the community in the planning, development, and stewardship of open spaces.

These guidelines ensure that local and settlement-level planning is comprehensive, sustainable, and inclusive, promoting balanced development while protecting and enhancing the quality of life for residents.