

11.



**cooperative
governance**

Department:
Cooperative Governance
REPUBLIC OF SOUTH AFRICA

SMART CITIES READINESS REPORT

IDENTIFICATION CRITERIA OF CITIES AND TOWNS FOR REDESIGN
AND REFURBISHMENT AS SMART CITIES

AUGUST 2022

PREPARED BY: STEFANIE CHETTY

DIRECTOR SPATIAL AND URBAN DEVELOPMENT PLANNING

11.

1. Purpose the document

The purpose of this document is to appraise the Minister to undertake work internally to avoid missing the APP Target due to the SCM and BSC delays on the appointment of an external service provider on the following:

- Develop an Identification Criteria for Cities/ Towns to be undertaken in the outcome of this APP Project.
- Develop a TOR that would be for an Advisory Committee upon which the role of that advisory committee would be to undertake the guidance of the development of an assessment framework through which they will assist to reflect on the state of readiness of the 17 selected towns/cities to implement smart city initiatives based on the analysis determine the 5 to 8 cities/towns thereafter guide the process of the redesign and refurbishment and what that 5 to 8 cities/ towns would entail.

This report / document constitutes a second quarter target as indicated in the 2022/23 Annual Performance Plan (APP) of the Department of Cooperative Governance (DCOG). The development of this report is part of a process that will lead the Department in support developing a support programme for the redesign and refurbishment of identified towns/cities by March 2023. It must be noted that this project is supposed to be outsourced but we are currently still busy with the BSC Process. This report is a mechanism to try and achieve the target internally.

2. Context and Background

The world is becoming more and more urbanised, and across the globe people are moving to cities in large numbers. If cities are to overcome the challenges that accompany rapid urbanisation, rural-urban migration, climate change and general resource constraints, they have to become centres of innovation and creativity. Responding to challenges such as congestion, rising crime, growing urban poverty and the need for more efficient service delivery practices, an increasing number of cities have made the choice to use smart technologies and encourage innovative practices as part of their efforts to become more resilient and liveable.

In his State of the Nation Address (SONA) in June 2019, the President of South Africa, Mr. Cyril Ramaphosa, expressed his dream of building a South African smart city. In the February 2020 SONA, the President announced more concrete plans to develop a smart city in the country. These statements provoked discussion around the notion of Smart Cities within the South African context.

11.

It is against this background that the 2019 – 2024 Medium Term Strategic Framework (MTSF) and subsequent revision identified the identification of towns/cities for redesign and refurbishment as a critical priority .

A “smart city” could be described as a settlement where investments in human and social capital as well as traditional and modern communication infrastructure fuel sustainable economic development, a better quality of life and prudent management of natural resources.

The Department of Cooperative Governance (DCoG) provides leadership in the development of cities and towns in South Africa. The department drafted this Smart Cities Framework (SCF) to support all those involved in the planning and implementation of smart city initiatives with impartial, factual information about smart cities in South Africa. The SCF supports DCoG in its efforts to guide and coordinate smart city initiatives implemented at municipal level throughout the country.

The SCF shares learning on the potential contribution of smart cities as well as the perceived limitations of these types of interventions. It further emphasises the critical characteristics of South African cities and towns that need to be considered when planning and implementing smart city initiatives. The unique South African context calls for local and tailor-made interventions to develop settlements that are not only smart but also inclusive. Any smart city initiative should contribute to the well-being of ordinary city dwellers and support the broad national vision for human settlements outlined in, among others, the National Development Plan (NDP) and the Integrated Urban Development Framework (IUDF).

The SCF further assists in establishing a common understanding of smart cities in the South African context and outlines a set of principles to guide decision-making for smart cities. The document concludes with highlighting critical issues to consider and outlining initial steps to be taken when identifying, planning and implementing smart city initiatives.

The three spheres of government are continuously looking for ways to improve service delivery, effectiveness and efficiency and to create a better future for all. People-focused smart cities could potentially become inclusive centres of innovation, creativity and prosperity.

3. Problem Statement

South African cities and towns are increasingly pressured to become smarter. However, the lack of a common understanding of the concept makes it difficult for some to identify appropriate interventions. Uncertainties regarding the benefits and pitfalls related to smart cities also hamper progress in implementing smart city initiatives. Furthermore, there are many misunderstandings regarding the interpretation of smart cities that is appropriate to the South African context.

This South African Smart Cities Framework (SCF) was developed by the Department of Cooperative Governance (DCoG) to provide municipalities, national and provincial government, the private sector, civil society and other role players with impartial, factual information about smart cities in South Africa. The SCF supports DCoG in its efforts to guide and coordinate smart city initiatives planned and implemented throughout the country.

The purpose of the SCF is to guide decision-making and provide all role players with a structured approach to identifying, planning and implementing smart city initiatives that are appropriate to the local context. Because smart cities must be informed by, and respond to, local conditions, the SCF does not contain instructions or specifications. For the same reason, the framework does not prescribe minimum standards or requirements for smart cities, initiatives or technologies. The framework rather guides and informs decision-making to ensure smart city initiatives are appropriate to the particular context.

3.1 The objectives of the SCF include the following:

- a) To share local and international learning to provide all role players with factual information on the benefits and advantages as well as the challenges and disadvantages that need to be taken into account when planning and implementing smart city initiatives.
- b) To highlight the South African realities that need to be considered when planning and implementing smart city initiatives to ensure that such initiatives are appropriate to the local context.
- c) To assist in developing a common understanding of the concept of a smart city and propose a South African interpretation of various aspects related to smart city initiatives.
- d) To outline a set of principles to provide guidance when decisions have to be made regarding the identification, planning and implementation of smart initiatives and technologies.
- e) To outline the factors to consider, and the steps to be taken, when identifying, planning and implementing smart city initiatives.

4. Objective of Assignment

Develop a criteria that will inform the baseline for the Identification of existing Cities/ Towns in the Following municipalities for the Redesign and Refurbishment to support the APP Target.

Municipal Category	Municipality	Province	STR Town

11.

Category A	Nelson Mandela Bay Metro	EC	Colchester
	Mangaung Metro	FS	
Category B	Kouga LM	EC	Thornhill
	KSD LM	EC	
	Walter Sisulu LM	EC	Aliwal north
	Enoch Mgijima LM	EC	
	Ray Nkonyeni LM	KZN	Izingolweni
	Umuziwabantu LM	KZN	Harding
	Umdoni LM	KZN	Umzinto
	Umhlathuze LM	KZN	
	uMfolozi LM	KZN	
	Umzambe LM	KZN	
Category C	Ilembe District	KZN	Mandeni
	Ehlanzeni District	MP	Thaba chweu
	Harry Gwala District	KZN	Kokstad, Ixopo, Bulwer, Highflats, Creighton, Underberg, Himeville
	West Coast District	WC	Piketberg, Malmesbury, Moreesbury, Elandsbaai, Hopefield

5. Deliverables

Develop the baseline criteria for the identification of existing cities/ towns.

6. Rational behind the criteria for identification of city/ town

The following are guiding principles that inform the Identification of Cities/ Towns for the selection of Redesign and Refurbishment:

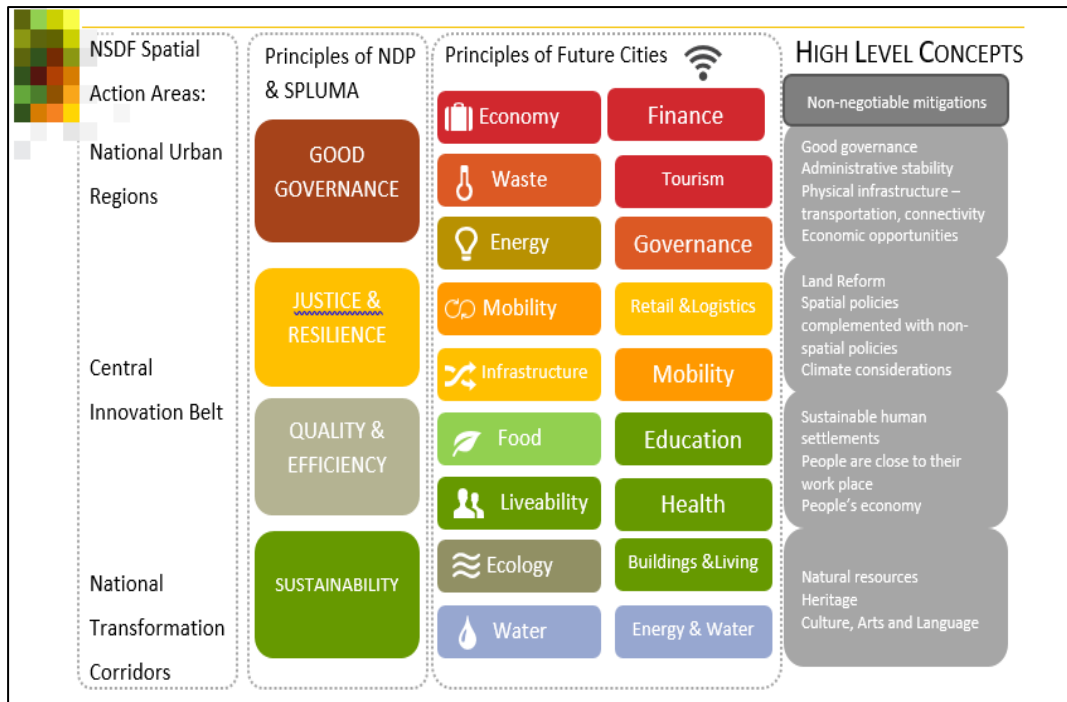


Diagram DCOG Draft Targets and Indicators for Smart Cities Initiatives 2022

7. The Cities/ Towns for selection can be identified if they meet the minimum requirement criteria below:

7.1 Clean Audit – financial stability

The Municipality is compliant in terms of the annual audit findings and is given a clean audit status by the Auditor General. The table below delineates the level of compliance for the Cities/ Towns that will be able to meet the Criteria of Clean Audit.

MUNICIPALITY	PROVINCE	AUDIT OUTCOME			MUNICIPALITY	PROVINCE	AUDIT OUTCOME			MUNICIPALITY	PROVINCE	AUDIT OUTCOME			MUNICIPALITY	PROVINCE	AUDIT OUTCOME							
		2017/18	2016/17	2015/16			2017/18	2016/17	2015/16			2017/18	2016/17	2015/16			2017/18	2016/17	2015/16					
METROPOLITAN MUNICIPALITIES																								
Buffalo City	EC	●	●	●	Ngaka Modiri Molema	NW	●	●	●	Dhlabeng	FS	●	●	●	Mthoranyani*	KZN	●	●	●					
Nelson Mandela Bay	EC	●	●	●	Frances Baard	NC	●	●	●	Kiparong	FS	●	●	●	Mtubatuba	KZN	●	●	●					
Mangaung*	FS	●	●	●	John Tsiso Gaetane	NC	●	●	●	Letameng	FS	●	●	●	Butha Buthe	MP	●	●	●					
City of Ekurhuleni	GP	●	●	●	Namakwa	NC	●	●	●	Mafube	FS	●	●	●	Newcastle	KZN	●	●	●					
City of Johannesburg	GP	●	●	●	Pitsoy Ka Seme	NC	●	●	●	Maluti A Phofung	FS	●	●	●	Nkandla	KZN	●	●	●					
City of Tshwane	GP	●	●	●	ZF Mgqwana	NC	●	●	●	Mantsoa	FS	●	●	●	Norongoma	KZN	●	●	●					
eThekweni*	KZN	●	●	●	Cape Winelands	WC	●	●	●	Masixanyana	FS	●	●	●	Nquthu	KZN	●	●	●					
City of Cape Town	WC	●	●	●	Central Karoo	WC	●	●	●	Matjhabeng	FS	●	●	●	Okhahlamba	KZN	●	●	●					
DISTRICT MUNICIPALITIES																								
Alfred Nzo	EC	●	●	●	Garden Route	WC	●	●	●	Ray Nkonyeni*	KZN	●	●	●	Richmond	KZN	●	●	●					
Amathole	EC	●	●	●	Overberg	WC	●	●	●	Umtshini	KZN	●	●	●	Ukhahlamba	KZN	●	●	●					
Chris Hani	EC	●	●	●	West Coast	WC	●	●	●	Umtshini	KZN	●	●	●	Umtshini	KZN	●	●	●					
Joe Gqabi	EC	●	●	●	LOCAL MUNICIPALITIES																			
OR Tambo	EC	●	●	●	Amathole	EC	●	●	●	Amathole	EC	●	●	●	Umtshini	KZN	●	●	●					
Sarah Baartman	EC	●	●	●	Blue Crane Route	EC	●	●	●	Nquthu	KZN	●	●	●	Umtshini	KZN	●	●	●					
Faustin Dabi	FS	●	●	●	Dr Beyers Naudé*	EC	●	●	●	Nquthu	KZN	●	●	●	Umtshini	KZN	●	●	●					
Lejweleputswa	FS	●	●	●	Elanini	EC	●	●	●	Phumelele	FS	●	●	●	Umtshini	KZN	●	●	●					
Thabo Mofutsanyana	FS	●	●	●	Emalaheni	EC	●	●	●	Setoto	FS	●	●	●	Umtshini	KZN	●	●	●					
Xhariep	FS	●	●	●	Engcobo	EC	●	●	●	Tokologo	FS	●	●	●	Umtshini	KZN	●	●	●					
Seiberg	GP	●	●	●	Enoch Mgama	EC	●	●	●	Tswelopele	FS	●	●	●	Umtshini	KZN	●	●	●					
West Rand	GP	●	●	●	Great Kai	EC	●	●	●	Emfuleni	GP	●	●	●	Umtshini	KZN	●	●	●					
Amajuba	KZN	●	●	●	Inggaza Hill	EC	●	●	●	Lesedi	GP	●	●	●	Umtshini	KZN	●	●	●					
Harry Gwala	KZN	●	●	●	Intsika Yethu	EC	●	●	●	Marofong City	GP	●	●	●	Umtshini	KZN	●	●	●					
Lembe	KZN	●	●	●	Inxuba Yethemba	EC	●	●	●	Mdwalisi	GP	●	●	●	Umtshini	KZN	●	●	●					
King Cetshwayo	KZN	●	●	●	King Sabata Dalindyebo	EC	●	●	●	Mogale City	GP	●	●	●	Umtshini	KZN	●	●	●					
Ugu	KZN	●	●	●	Kouga	EC	●	●	●	Rand West City	GP	●	●	●	Umtshini	KZN	●	●	●					
uMgungundlovu	KZN	●	●	●	Koukamma	EC	●	●	●	Alfred Duma	KZN	●	●	●	Umtshini	KZN	●	●	●					
uMhlabiyani	KZN	●	●	●	Makana	EC	●	●	●	Big 5 Hlabisa	KZN	●	●	●	Umtshini	KZN	●	●	●					
uMzinyathi	KZN	●	●	●	Molatele	EC	●	●	●	City of uMhlabuze*	KZN	●	●	●	Umtshini	KZN	●	●	●					
uThukela	KZN	●	●	●	Mbhashe	EC	●	●	●	Dannhauser	KZN	●	●	●	Umtshini	KZN	●	●	●					
Zululand	KZN	●	●	●	Mbizana	EC	●	●	●	Dr Nkomozi Dlamini Zuma	KZN	●	●	●	Umtshini	KZN	●	●	●					
Capricorn	LP	●	●	●	Mkhonjalo	EC	●	●	●	eDunbe	KZN	●	●	●	Umtshini	KZN	●	●	●					
Mopani	LP	●	●	●	Mthunzi	EC	●	●	●	eMdlantsi	KZN	●	●	●	Umtshini	KZN	●	●	●					
Sekhukhune	LP	●	●	●	Ndlambe	EC	●	●	●	Endumeni	KZN	●	●	●	Umtshini	KZN	●	●	●					
Vhembe	LP	●	●	●	Nqunzha	EC	●	●	●	Greater Kokstad	KZN	●	●	●	Umtshini	KZN	●	●	●					
Waterberg	LP	●	●	●	Ntabankulu	EC	●	●	●	Impendle	KZN	●	●	●	Umtshini	KZN	●	●	●					
Ehlanzeni	MP	●	●	●	Nyamandeni	EC	●	●	●	Inkosi Langalibalele	KZN	●	●	●	Umtshini	KZN	●	●	●					
Gert Sibande	MP	●	●	●	Port St Johns	EC	●	●	●	Jozini	KZN	●	●	●	Umtshini	KZN	●	●	●					
Nkangala	MP	●	●	●	Raymond Mhlaba	EC	●	●	●	KwaDukuza	KZN	●	●	●	Umtshini	KZN	●	●	●					
Bojanala Platinum	NW	●	●	●	Sakhisizwe	EC	●	●	●	Mandeni	KZN	●	●	●	Umtshini	KZN	●	●	●					
Dr Kenneth Kaunda	NW	●	●	●	Senqu	EC	●	●	●	Maphumulo	KZN	●	●	●	Umtshini	KZN	●	●	●					
Dr Ruth Segomotsi Mompati	NW	●	●	●	Sundays River Valley	EC	●	●	●	Mkhamabuthini	KZN	●	●	●	Umtshini	KZN	●	●	●					
					Umonqumbi	EC	●	●	●	Mxolana	KZN	●	●	●	Umtshini	KZN	●	●	●					
					Walter Sisulu	EC	●	●	●	Musina*	KZN	●	●	●	Umtshini	KZN	●	●	●					
										Potlakoane*	KZN	●	●	●	Umtshini	KZN	●	●	●					

CLEAN AUDIT	FINANCIALLY UNQUALIFIED WITH FINDINGS	QUALIFIED AUDIT OPINION	ADVERSE AUDIT OPINION	DISCLAIMER OF AUDIT OPINION	AUDIT NOT FINALISED AT LEGISLATED DATE	NEW AUDITEE
-------------	---------------------------------------	-------------------------	-----------------------	-----------------------------	--	-------------

*Audit outcomes prior to 2016/17 relate to only the historical entity before the amalgamation that took effect in August 2016.

DCOG Small Town Regeneration Strategy 2021 Municipal audit outcomes

7.2 Policy Compliance

- SA has a plethora of overarching and interdependent acts, policies and programmes which govern and direct development, being it spatial, social, economic or environmental in nature. For example, in terms of legislation, the Municipal Systems Act, Act 32 of 2000 requires all municipalities to prepare and formally adopt Integrated Development Plans (IDP) with a five-year strategic plan, which are to be reviewed annually in consultation with communities and other stakeholders. In the same vein, according to the SPLUMA all municipalities are to prepare a five-year Spatial Development Framework (SDF) to guide and direct spatial planning and land-use management. Furthermore, all Municipalities are required, in terms of Section 24(1) of SPLUMA to develop a single land-use scheme, which must

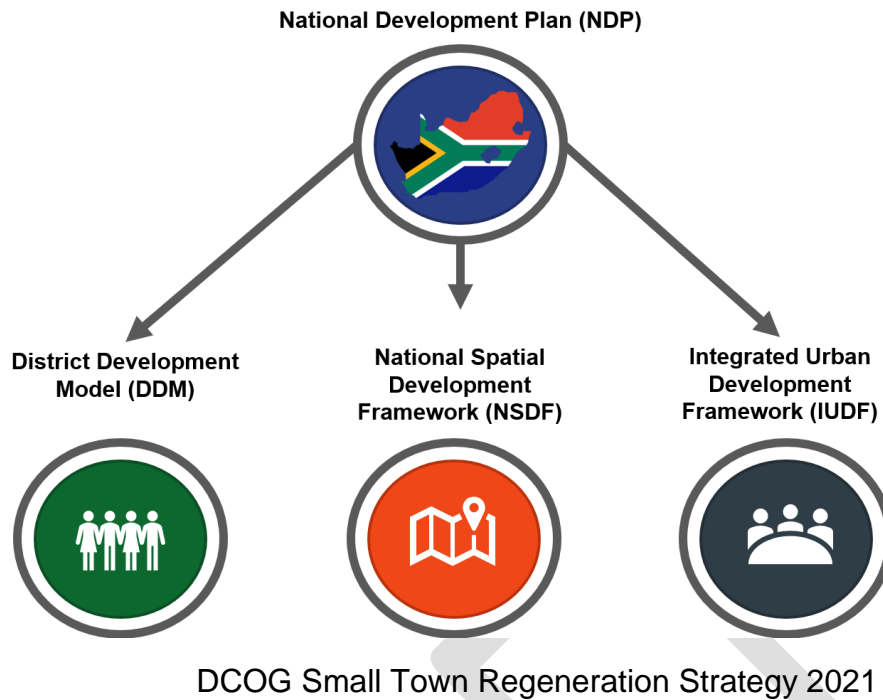
11.

cover the whole of the municipality's municipal area (commonly referred to as wall-to-wall land-use management schemes). (DCOG Small Town Regeneration Strategy 2021)

- The Cities/Towns must have SPLUMA Compliant SDFS and IDPS and Wall to Wall Land Use Schemes as a minimum to initiate Smart City Initiatives.

- On the policy spectrum, there is for example, the Local Economic Development (LED) approach aimed at maximizing the economic potential of municipalities and to encourage local people to work together.

- The IUDF is a policy response to urbanisation trends as well as the key directives of the NDP. Its key outcome is spatial transformation (IUDF, 2016: 36), with the objective of creating cities and towns that are functionally integrated, balanced and vibrant. In this aim, the IUDF asks the question... “how best do we manage urbanisation and achieve the goals of economic development, job creation and improved living conditions?” To answer this question, and through a whole-of-government and all-of society approach, the IUDF establishes that it is important to understand the differences as well as linkages between urban and rural areas. Therefore, it makes sense that the IUDF has been conceptualised across a spectrum of municipal spaces to guide the future growth and management of urban areas in a coordinated and homogenous manner. Therefore, attempts and recommendations to improve the regeneration of small towns should be guided by and in alignment with the four strategic goals of the IUDF, namely (IUDF, 2016:8):
 - spatial integration: to forge new spatial forms in settlement, transport, social and economic areas;
 - inclusion and access: to ensure that people have access to social and economic services, opportunities and choices;
 - growth: to harness urban dynamism for inclusive, sustainable economic growth and development; and
 - governance: to enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.(DCOG Small Town Regeneration Strategy 2021)



- The National Development Plan 2030 (NDP), drafted by the National Planning Commission and adopted by Cabinet in 2012 recognises the challenges of cities in the discourse of urbanisation, and small towns and their surrounding hinterlands are included as important elements in the urbanisation conversation. It identifies long term integrated planning (spatial planning) as a requirement and crucial to the performance and implementation of the strategic vision of the NDP.
- The National Spatial Development Framework (NSDF) is drafted in terms of Sections 12, 13 and 14 of SPLUMA and is the spatial mechanism through which the NDP must be realised. The NSDF does three important things, namely: (1) Protects our natural environment and ecosystems for future generations, by demarcating areas for conservation and preservation and identifying environmental risk areas; (2) Identifies the future sustainable urban form by means of dense nodes connected with one another in functional corridors; and (3) Spatially defines and identifies where different sector investments must go, so that investment can be crowded in.
- The DDM is premised a practical IGR mechanism for all three spheres of government, including its state-owned entities (SOEs) to work jointly and to plan and act in unison and is seen as an operational model for improving cooperative governance aimed at building a capable, ethical developmental state. The model is a collaborative process in the form of a single plan for all 44 districts and eight metropolitan municipalities which is synchronized with IDPs of municipalities. The DDM aims to complement the IUDF in addressing major social, spatial and economic challenges and is a method of government

11.

operating in unison focusing on the municipal district and metropolitan spaces as the impact areas of joint planning, budgeting and implementation. The DDM approach aims to empower district municipalities to have the requisite skills to undertake feasibility studies and package bankable projects for the local municipalities within their jurisdiction's bridges.

- The Cities/Towns must reference the NDP, IUDF, NSDF and DDM in its Spatial Planning Policies (SDFs, IDPS, Strategies/ Frameworks)

7.3 Functional and Operational council

The Cities/Towns must have a fully-fledged functional and operational council. The council must be operational and active and sits frequently for example that sits Monthly on Land Development Applications (MPT)



Diagram DCOG Draft Targets and Indicators for Smart Cities Initiatives 2022

7.4 DDM One Plan

The Cities/ Towns must have an approved DDM One Plan and they must be implemented

7.5 Capacity in terms of Organisational structure

The Cities/Towns must have necessary capacity to undertake Smart City Initiatives at a municipal level

- Determine the Municipality has sufficient capacity to undertake smart city initiatives
- Has the Cities/ Towns undergone a readiness assessment?
- Is there a champion for the Smart City Initiatives within the local municipality?

7.6 Smart City Initiatives

The Cities/ Towns must have existing smart city initiatives – have they started implementing such initiatives in their policy frameworks that shows readiness that touch on:

7.6.1 Infrastructure capability

Roads – accessibility to major routes – linkage to regions

Water and sanitation – who supplies, if District Municipality is it functioning

Electricity – Eskom or LM – if Local Municipality is it functioning

ICT – level of ICT infrastructure existing ICT, Wifi, Fibre, online Cadastral/ GIS

7.6.2 Social

- Population growth rate due to Urbanisation– upward or downward, provides an indication of pressure on Local Municipality to deliver services
- Skilled population
- Level of social services provided and needs

7.6.3 Economic Issues

- The Cities/ Towns showcase the importance of:
 - GDP Contributions,
 - Investment opportunities – development pressure,
 - Contributions to economy – sector contribution determine the competitive sectors
 - Identification of the key drivers of economic development
 - Economic development strategies applied as per economic strength and resource base of each small town.
 - Regional economic growth resulting to increase in employment levels, RGDP, and GVA
 - The role and function of the town in the national space economy (This is informed by the Small Town Regeneration Strategy 2021)
 - The Cities/Towns shows Alignment with the national plans, ensures resource prioritisation from a national to local level.
- At a national level town's must:
 - Strengthen the role of the region, corridor, or priority area within which they fall.
 - Support the function of cities and hinterland which they border.

7.7 The role and function of the town in the regional space economy

The Cities/ Towns must at a regional level, advance the goals of:

- Enhancing the role of the region.

11.

- Support the small town and rural economies.
- Reconcile sectoral plans with spatial plans.
- Look at opportunities for diversification of the town economy.

7.8 Accessibility and Connectivity (This is informed by the Small Town Regeneration Strategy 2021)

The Cities/ Towns that Prioritise small towns that are located along national and regional routes.

- Invest in adequate and efficient transport infrastructure.
- Towns that fall along national and regional routes, corridors.

8. The Way Forward

The above Identification Criteria was informed by various references. The next steps of the Project will be towards determining the state of readiness of the identified towns/cities by developing a readiness assessment framework. This means that applying the readiness assessment framework we need to identify 5 to 8 towns and include the baseline identification criteria developed in this document. The state of readiness will be followed by brief description of each identified town/city through an analysis outcome which will then determine the 5 to 8 towns. There after an advisory committee would be established to undertake to guide the development of the assessment framework and undertake the guidance towards the redesign and Refurbishment of those identified 5 to 8 Cities/Towns. This project is currently funded by MISG funds and are committed 2022/2023 financial year. This initiative will then be put forward as a recommendation of the 5 to 8 cities/towns that will be targeted for redesign and refurbishment to the Minister for approval.

9. References

Ayyoob Sharifi Pourya Salehi Editors: Urban Book Series on Resilient Smart Cities

DCOG Smart Cities Framework 2021

DCOG Draft Targets and Indicators for Smart Cities Initiatives 2022

DCOG Small Town Regeneration Strategy 2021

SACN SMART CITIES PAPER SERIES: Smart Governance in South African Cities