



**Western Cape
Government**

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Western Cape Provincial Spatial Development Framework

ANNEXURES

March 2014



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FRONT COVER IMAGE:

AERIAL VIEW OF WELLINGTON
(WWW.SKYSCRAPERCITY.COM)

ALL IMAGES & DIAGRAMS NOT SOURCED CREATED BY CITY THINK SPACE

ANNEXURE 1

PROVINCIAL OVERVIEW

1. PROVINCIAL CONTEXT

To contextualise the PSDF, this chapter profiles the Western Cape's development status with a focus on spatial considerations. Initially the province's demographic and socio-economic conditions are profiled, and then the state of the provincial economy, and natural and built environments are covered.

The chapter draws on evidence presented in recent provincial studies, such as the Provincial Economic Review Outlook (PERO 2013), the Western Cape State of the Environment (SOE 2013) reports, the update of the 2010 Growth Potential Study (GPS 2013), the Western Cape Infrastructure Framework (WCIF 2013), the Provincial Land and Transport Framework (PLTF 2013), and specialist PSDF studies undertaken in 2013. Details of the information presented in these and other baseline reports is not repeated in this document, only key findings pertinent to the PSDF are highlighted.

1.1. DEMOGRAPHIC FEATURES

1.1.1. POPULATION SIZE, COMPOSITION AND AGE STRUCTURE

The Western Cape makes up 10.6% of the country's land surface and accommodates 11.2% of the national population (i.e. StatsSA estimate the mid 2013 population at 6 016 900). For historical reasons, the Western Cape's population composition is dissimilar from other provinces with the coloured population group making up under half (49%), Africans 33% and whites 15%. Half the population speak Afrikaans at home, a quarter isiXhosa and 20% English. The Western Cape has an older age profile than the rest of the country.

1.1.2. URBANIZATION LEVELS

The Western Cape is a highly urbanised province. The 2011 Census shows that no people reside in traditional rural areas, as against 30% nationally. 81% of the provincial population resides in formal residential areas,

a further 7% in informal residential areas, and almost 8% on farms, which is double the national average. "The high percentage of the Western Cape population living in urban areas and in formal residential areas makes it potentially easier to pursue inclusive growth strategies than in most other provinces" (PERO 2013, p123). On the other hand, the relatively high proportion of people living on farms presents unique rural service delivery challenges.

1.1.3. POPULATION DISTRIBUTION

The provincial population and economy is geographically concentrated in the Cape Metro region (i.e. 74% (+- 4.3m people) live there and it contributes approximately 85% of the province's GDP,) and in towns along the coastal belt. In contrast the Central Karoo is sparsely populated (i.e. it covers a vast geographic area yet accommodates less than 51 000 people). Whilst the geographic concentration of the provincial population facilitates targeted service delivery, the sparsely

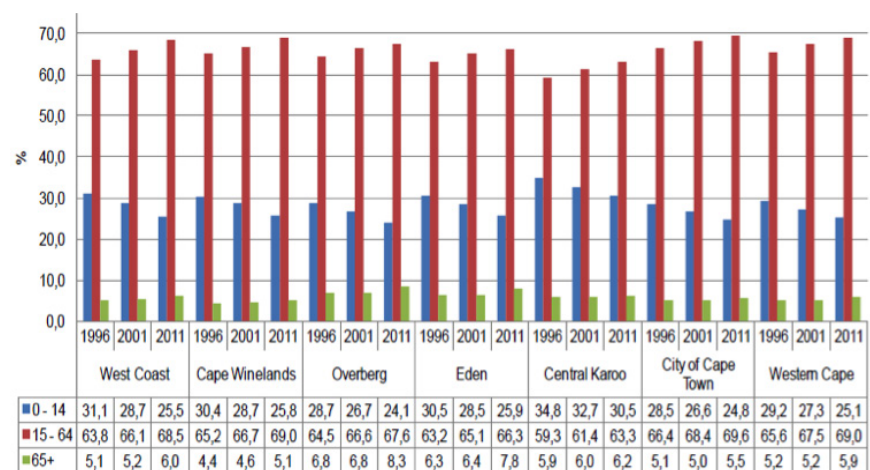


TABLE.1.1 POPULATION DISTRIBUTION BY FUNCTIONAL AGE GROUPS AND DISTRICT MUNICIPALITY AS % OF TOTAL (STATSSA 2012C)

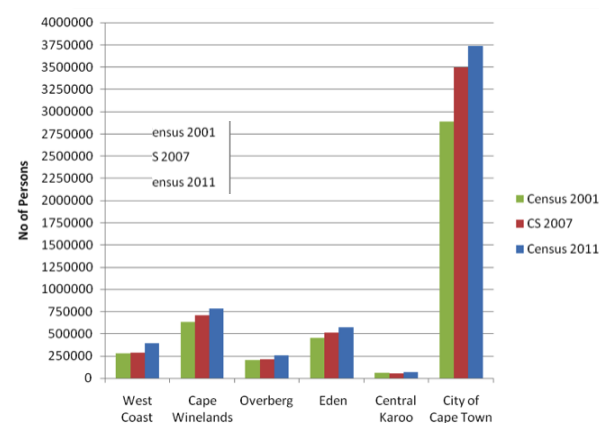


TABLE.1.2 POPULATION GROWTH IN THE WCP (STATSSA 2013)

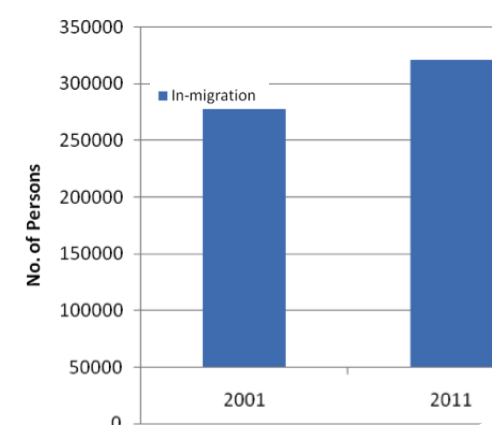


TABLE.1.3 NO. OF PERSON MIGRATING INTO THE WCP FROM 2001 TO 2011 (STATSSA 2013)

populated outlying rural areas are more complex.

1.1.4. POPULATION GROWTH AND IN-MIGRATION

The Western Cape's population is growing faster than national averages, largely on account of in-migration (i.e. StatsSA estimate that the province received a net gain of 225 657 people between 2006 and 2011, 35% of whom were from outside the country, 31% from the Eastern Cape, and some 14% from Gauteng). The provincial population growth rate is relatively stable (i.e. the 1996, 2001 and 2011 Census results reflect a marginal decrease from 2.6% to 2.5% per annum). The fertility rate in the Western Cape has declined considerably over the years, and is lower than the rest of the country. Of significance is that in-migration accounts for approximately one third of the population growth rate, which places additional burdens on government's service delivery efforts – particularly in the main economic centres.

1.1.5. GEOGRAPHIC DIFFERENCES IN POPULATION GROWTH

Population growth rates vary within the province (i.e. between 2001 and 2011 the West Coast District recorded the fastest population growth rate (3.3% pa), albeit from a low base, and the Central Karoo the lowest (1.3% pa)). The City of Cape Town's growth rate of 2.5% pa translates into some 93 500 additional people per year (i.e. 27 500 new households), reflecting where the epicentre of the provincial service delivery challenge lies.

1.1.6. HOUSEHOLD SIZE

Household size in the Western Cape is decreasing (i.e. the 2011 Census records that the average household size declined from

3.7 persons per household in 2001 to 3.4 in 2011). Although population growth rates have stabilised, a smaller household size means that there are proportionally more households to which government has to deliver services.

VULNERABILITY (0: least - 1:most)	
DC1: West Coast	0.51243
DC2: Cape Winelands	0.48775
DC3: Overberg	0.48561
DC4: Eden	0.49682
DC5: Central Karoo	0.62446
CPT: City of Cape Town	0.39531
Western Cape	0.43142

TABLE.1.5 VULNERABILITY PER DISTRICT (STATSSA 2013)

1.2. SOCIO-ECONOMIC FEATURES

1.2.1. EMPLOYMENT

After the 2008 global financial crisis employment in South Africa declined significantly, but has subsequently stabilised as the country emerged from the recession. StatsSA data reveals that current employment levels in the Western Cape are still slightly lower than in 2008, reflecting no real change in employment. They estimate that currently 75% of the province's expanded labour force (or just over half of the working age population) are employed, and that the informal sector accounts for 11 per cent of provincial employment. Whilst the City of Cape Town and Eden District have experienced moderate employment growth in recent years,

this has been off-set by job shedding in the rest of the province.

1.2.2. UNEMPLOYMENT

StatsSA estimate that narrow unemployment in the Western Cape increased from 393 000 to 552 000 people between 2008 and 2013 (i.e. the number of jobs declined by a 7%). Job losses have been most pronounced in the formal and informal agricultural sector. Those unemployed who are not actively looking for a job comprise only 1% of the provincial expanded labour force, in comparison to almost 12% nationally. This significant difference is a result of the Western Cape not having isolated 'deep' rural areas which tend to have limited job prospects. The province's young adults are substantially more likely to be unemployed than those older, with the young accounting for more than two-thirds of the unemployed. Most of those unemployed have not complete secondary education (54.8%) or matric (29.3%), and unemployment is more prevalent amongst females and Africans. In terms of the spatial distribution of unemployment, the City of Cape Town had a relatively high narrow unemployment rate of 24.5 per cent in 2007, and the rate was far less in other districts (i.e. it ranged between 15.6% in the West Coast and 18.5% in Eden), with the exception of the Central Karoo (30.9%).

1.2.3. EMPLOYMENT SKILLS

The Western Cape has a higher proportion of high skilled workers (19.3% versus 18% nationally), as well as low skilled workers (22.4% versus 20.1% nationally). The relatively high proportion of low skilled workers highlights the importance of development policies promoting inclusive growth, such as raising the

employment intensity of production, particularly of low-skilled employment.

1.2.4. POVERTY

Whilst poverty is lower in the Western Cape than in other province, poverty is still wide-spread (i.e. 2008/09 Living Conditions Survey found that almost a quarter of the population fell below the poverty line). The recession emanating from the 2008 global financial crisis and resultant unemployment has increased poverty. "Current economic growth will only be (or remain to be) inclusive if policies effectively promote broad-based participation in a growth process that is driven by productivity and income growth across sectors" (PERO 2013, p125).

1.2.5. INCOME AND INCOME INEQUALITY

Both average and median income per person in the Western Cape is slightly higher than in Gauteng, but far ahead of the national averages (PERO 2013). Of significance is that in terms of state assisted housing delivery, approximately 57% of households fall within the subsidy market, and 30% in the 'gap' market - only some 13% of households qualify for mortgages and are thus served by private sector delivery. Whilst income inequality is also comparatively lower in the Western Cape, the disparities between rich and poor in the province remain vast. UN Habitat's State of the World Cities 2012/13 report notes that although Cape Town is the country's 'least unequal' metropolitan city, globally it rates poorly in terms of income disparities and differential access to infrastructure and services.

1.2.6. HEALTH

The Western Cape is subject to a heavy burden

of disease (PERO 2013). Whilst HIV prevalence rates are low compared to other provinces, the Western Cape has a high prevalence of TB, chronic diseases and high injury morbidity and mortality rates, especially injuries due to interpersonal violence. Healthcare utilisation patterns in the Western Cape reflect declining usage of primary care facilities and increased usage of hospital-based care.

1.2.7. EDUCATION

By South African standards the Western Cape has a relatively well educated population. Of concern, however, is the large number of children who drop out of school after age 15. Most Western Cape schools are public schools, with less than 5% of learners in independent schools. Learner numbers in grades 1 to 12 are relatively stagnant, given declining fertility and that school enrolment has reached close to saturation levels. Whilst educational quality in the Western Cape is the highest in the country, there is still considerable scope for improvement to meet the needs of the economy.

1.2.8. SOCIAL ILLS

Alcohol and substance abuse is prevalent in the Western Cape, is often associated with violence and often spills over into the abuse of women and children. The province experiences high levels of crime, with inter-personal violence common. Gang warfare contributes to a culture of violence and sometimes spills over into the wider community affecting schools and households. For these reasons there is heightened insecurity amongst many communities (i.e. surveys reveal that Western Cape residents are less likely to use public transport, walk to shops or let their kids play in the street because of fears of violence).

1.2.9. LIVING CONDITIONS

Census data reveals that formal housing provision in the Western Cape has not kept up with household needs (i.e. the percentage of households resident in formal housing declined slightly from 81% to 78.9% between 2001 and 2011, whereas nationally this proportion increased substantially). Overcrowding and informal backyard housing are major issues. In the Western Cape, whilst compared to the rest of the country informal housing in informal settlements is less common. The Western Cape Department of Human Settlements estimates the housing backlog in the province at around 594 385 units, 61% of which is in the City of Cape Town.

1.2.10. ACCESS TO HOUSEHOLD GOODS

The 2001 Census reveals that residents in the Western Cape have the highest car ownership (44%) and access to the internet (44%) in the country. "Access to the internet by poor and marginalised communities in the Western Cape could be an area where appropriate policy initiatives could make a significant contribution to the attainment of inclusive growth. It could facilitate the acquisition of skills and knowledge among the youth from these communities that will enable them to participate in the growth process, in terms of both increasing productivity and making possible economic restructuring that will make more sectors competitive nationally and globally" (PERO 2013, p125).

1.2.11. LAND REFORM

Redistribution: Up to 2011 the Western Cape redistributed 4.2% of the 3.4m hectares redistributed nationally, comprising 240 projects and involving 14 197 beneficiaries (DRDLR 2011).

1.2.12.RESTITUTION

Whilst 20% of the 76 508 national claims were settled in the Western Cape up to 2011, these comprised less than 1% of the total area transferred nationally (DRDLR 2011) as they were mainly urban claims.

1.2.13.COMMONAGES AND MUNICIPAL LAND

It has not been possible to source up to date statistics on the transfer of land for municipal commonages. The draft report of the 2013 investigation into the Future of Agriculture and the Rural Economy (FARE) notes the alienation of some municipal land to commercial farmers. Overall the evidence suggests that the pace of land reform in the province has been slow, and that there has been limited employment of underutilised state, provincial and municipal land as well as commonage to date. Strategies to develop small scale farmers are yet to produce results at scale.

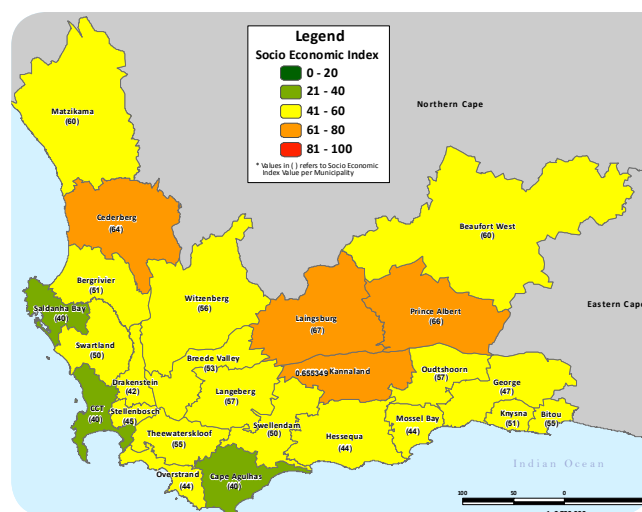


FIG.1.1 COMPOSITE SOCIO-ECONOMIC HOUSEHOLD INDEX PER MUNICIPALITY (DEPARTMENT OF SOCIAL DEVELOPMENT, 2013)

1.2.14.SPATIAL PATTERNS OF SOCIO-ECONOMIC CONDITIONS

Using the ward level 2011 Census results and following the World Bank's Human Development Index (HDI) methodology, the Western Cape Department of Social Development have developed indices for assessing household access to basic services, housing conditions, economic conditions and educational levels, as well as an overall composite socio-economic index. These indices have been calculated to identify areas of greatest need for developmental purposes (i.e. the most vulnerable Wards), and to objectively prioritize areas for projects. These indices, which serve as a proxy for assessing "poverty" in the Western Cape, are presented below:

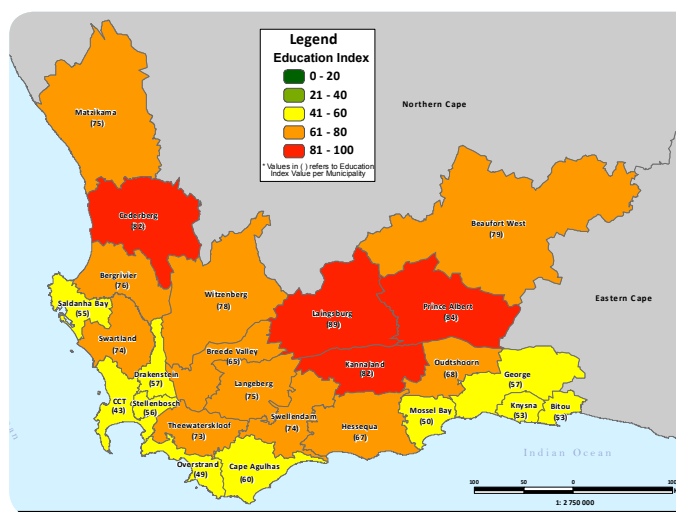


FIG.1.2 EDUCATIONAL INDEX PER MUNICIPALITY (DEPARTMENT OF SOCIAL DEVELOPMENT, 2013)

1.2.15.COMPOSITE SOCIO-ECONOMIC INDEX

With a ranking of 1 reflecting the most vulnerable areas and 0 areas least vulnerable, composite socio-economic indices per district are tabulated below and illustrated per local Municipality. It is evident that households in the Cederberg, Laingsburg, Prince Albert and Kannaland local Municipalities are the most vulnerable, whereas those in the City of Cape Town and Saldanha Bay and Cape Agulhas municipalities are the least vulnerable.

1.2.16.EDUCATION

In the Western Cape, most (95%) children aged between seven and 14 go to school, but there is a high dropout rate. Nevertheless, it is the best province in terms of the number of persons older than 20 years who have not had any form of education (only 2.7%). 14.4% of adults in the province have post-school qualifications. This is higher than the national average (12%), but lower than Gauteng (18%) (StatsSA 2012c). As illustrated below, within the province educational levels are lowest in Prince Albert and Laingsburg municipalities, and highest in the City of Cape Town.

1.2.17.HOUSING

The Department of Social Development's housing index assesses household living conditions in terms of the type of dwelling and its occupancy rate. As illustrated below, Hessequa, Cape Agulhas and Beaufort West municipalities recorded the highest ratings.

1.2.18.ACCESS TO BASIC HOUSEHOLD SERVICES

Focusing on households with Income below R38 401 per annum, the Household Services index illustrated below measures the level of access

to water supply, sanitation, energy for lighting and waste disposal. Low income households in Laingsburg and Cederberg municipalities are the most vulnerable in the province.

1.2.19.HOUSEHOLD ECONOMIC INDEX

The Department of Social Development's Household Economic Index, illustrated below, assesses household economic conditions in terms of employment, income and economic dependency ratios. Beaufort West, Prince Albert and Bitou Municipalities recorded the highest relative levels in the province.

Sources:

Extracts from State of the Environment Outlook Report for the Western Cape Province (May 2013)

Western Cape Census 2011: Socio-Economic Indicators, Department of Social Development (March 2013)

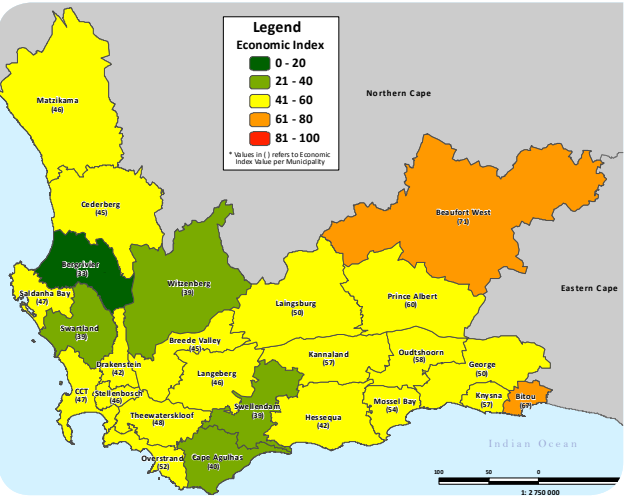


FIG.1.5 SOCIO-ECONOMIC INDEX PER MUNICIPALITY (DEPARTMENT OF SOCIAL DEVELOPMENT, 2013)

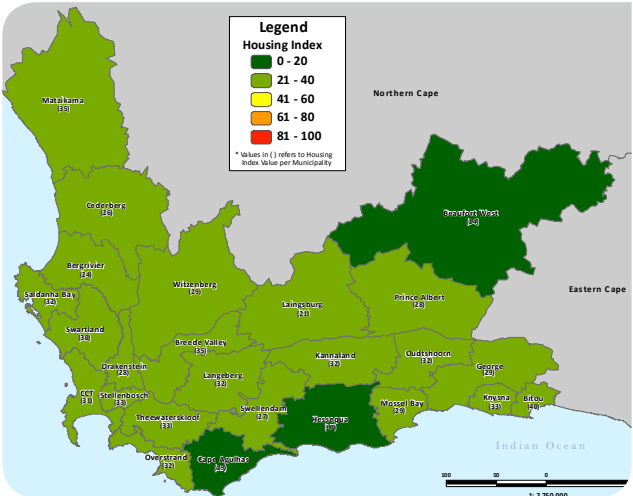


FIG.1.3 HOUSING INDEX PER MUNICIPALITY (DEPARTMENT OF SOCIAL DEVELOPMENT, 2013)

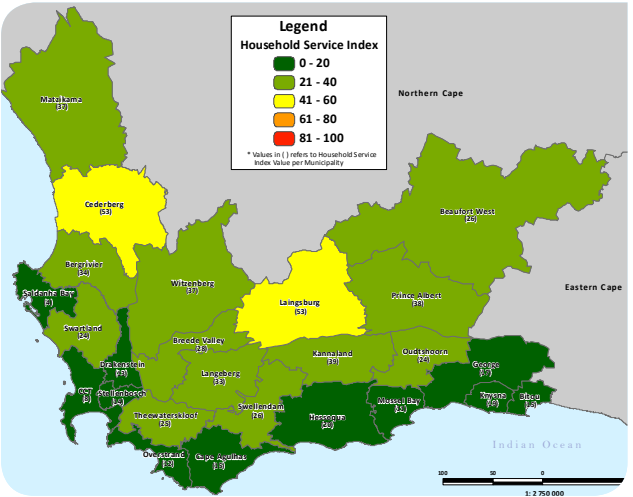


FIG.1.4 HOUSEHOLD SERVICES INDEX PER MUNICIPALITY (DEPARTMENT OF SOCIAL DEVELOPMENT, 2013)

1.3. ECONOMIC OVERVIEW

TABLE.1.4 REAL REGIONAL GDP BY DISTRICT 2010 (WCP 2012)

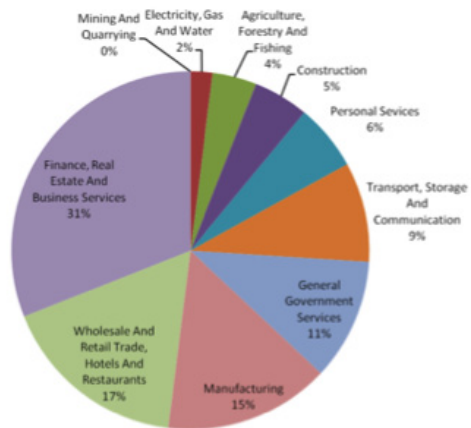
DISTRICT	2010 GDP (% share)
City of Cape Town	73.6
Cape Winelands	11.4
Eden	7.3
West Coast	4.2
Overberg	2.9
Central Karoo	0.6

1.3.1. ECONOMIC BASE

The finance, real estate and business sector (contributing 32% of GDP) dominates the Western Cape economy, followed by the manufacturing sector (17% of GDP), retail and wholesale trade, catering and accommodation sector (15% of GDP) and the transport, storage and communications sector and the government services sector each contribute an additional 10% of GDP. Whilst the Western Cape economy is essentially based on secondary and tertiary activities that take place in the province's main urban centres, many of these activities relate to adding-value to the outputs of the province's agriculture, forestry and fishing sector (4% of GDP). These linkages between the Western Cape's urban and rural economies are thus significant.

1.3.2. CURRENT ECONOMIC GROWTH

The Western Cape economy continued to grow at a faster pace than the national economy



Western Cape

TABLE.1.6 STRUCTURE OF THE WESTERN CAPE ECONOMIES (WCG 2012)

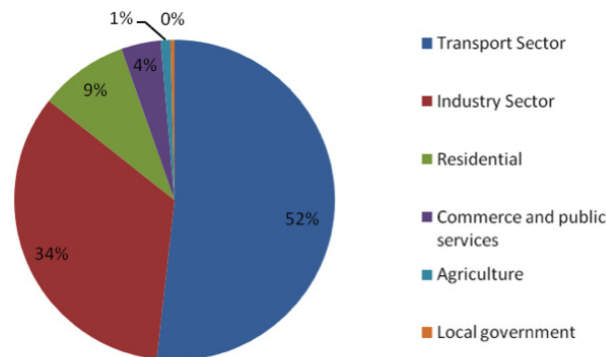


TABLE.1.9 ENERGY USE BY SECTOR (WCG 2013)

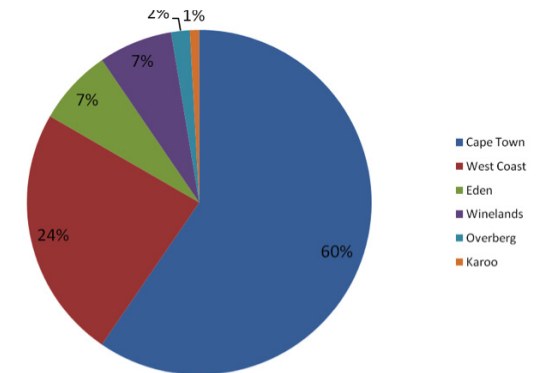
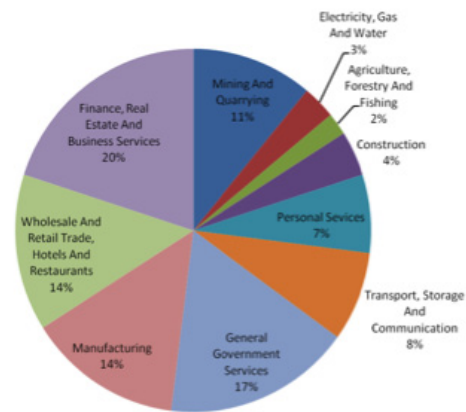


TABLE.1.10 ENERGY USE PER DISTRICT (WCG 2013)



Rest of South Africa

TABLE.1.7 STRUCTURE OF THE SOUTH AFRICAN ECONOMIES (WCG 2012)

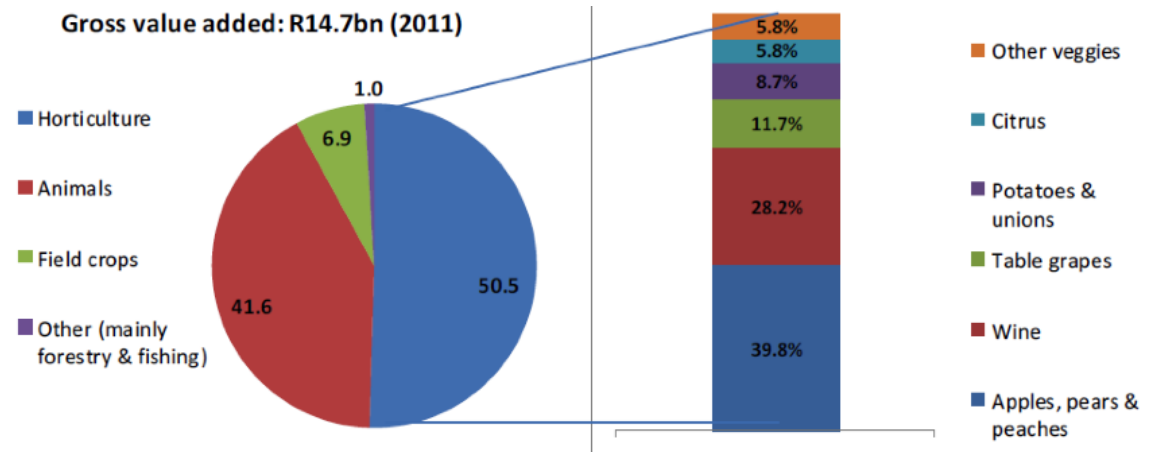


TABLE.1.8 STRUCTURE OF THE SOUTH AFRICAN ECONOMIES (WCG 2012)

during 2012 (i.e. 2.9% versus 2.5% nationally). Leading growth sectors were wholesale and retail trade, catering and accommodation (4.3%), followed by the financial intermediation, insurance, real estate and business services sector and the general government services sector (3.5% each). Declines were experienced in the mining and quarrying sector (-5.1%) and the electricity, gas and water sector (-1.4%). Whilst overall economic growth has outpaced population growth, PERO raises concerns that growth in the Western Cape's relatively sophisticated sectors is unlikely to have contributed to broad-based increases in labour income, or to sustainable poverty reduction.

1.3.3. PROVINCIAL SPACE ECONOMY

In terms of spatial patterns of economic activity, the Western Cape economy is geographically concentrated in the Cape Metropolitan Area (CMA) and the adjacent Cape Winelands District (i.e. 85% of real value added to the provincial economy is generated here). With regard to the different economic sectors the spatial patterns are as follows (PERO 2013):

Finance, insurance, real estate and business services:

- 80% takes place in the Cape Metro.
- In the rest of the province it accounts for between 23 and 27 per cent of district economic activity.

Manufacturing:

- Strong relative presence in the Cape Winelands (25% GDPR.)
- Accounts for 16 to 18 per cent of GDPR in other districts, except for the Central Karoo (11% GDPR).
- More than two thirds of the province's manufacturing sector is located in the Metro.

Retail, wholesale, catering and accommodation:

- The tourism industry plays a key role in stimulating the growth of the Eden District's internal trade sector (18% of GDPR).
- In all the other districts the sector accounts for 13 to 15 per cent of real GDPR.

Government services:

- In relative terms, it is the smallest in the Cape Metro (10% of the regional economy) and the largest in Eden (12.4%).
- Geographical concentrated in the Metro,

Winelands and Eden.

Transport, storage and communication:

- Well-represented throughout all districts, albeit relatively larger in the Cape Metro (mainly communications) and the Central Karoo (mainly transport).

Construction:

- Relatively larger roles in the Eden and Overberg districts.

Agriculture:

- Comprises 15% of West Coast economic activity, and 11% of the Cape Winelands and the Overberg.
- In absolute terms, the Winelands has the largest agriculture, forestry and fishing sector being home to more than a third of the province-wide agricultural sector.
- Factoring in downstream linkages with the agro-processing sector, agri-business is a key economic activity across all the districts including the Metro.

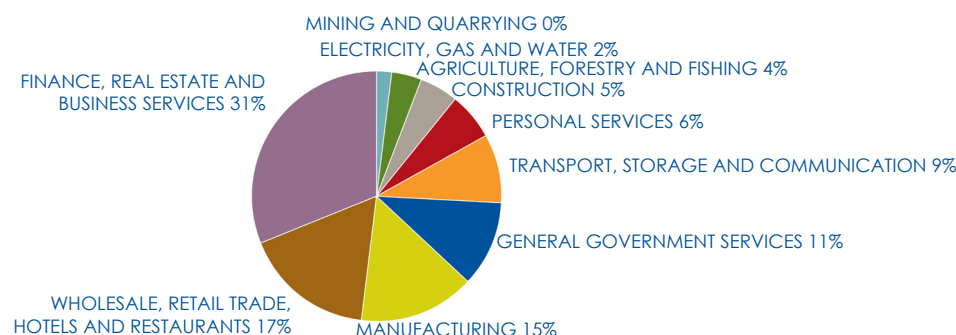


TABLE.1.11 CONTRIBUTION BY SECTOR TO THE WESTERN CAPE ECONOMY (WCG 2012)

1.3.4. GROWTH PROSPECTS BY ECONOMIC SECTOR

The Western Cape economy is forecast to grow at 3.6% per annum over the next five years, compared to 3.3 per cent at national level (PERO 2013). The leading growth sectors are forecast to be: construction (5.1% pa, driven by public sector infrastructure investment); the financial intermediation, insurance, real estate and business services sector (4.6% pa); the transport, storage and communication sector (4.3% pa). Underpinned by the province's establishment tourism industry, the wholesale and retail trade, catering and accommodation sector is forecast to grow at 3.1% pa. Manufacturing is also forecast to strengthen on the back of increased exports to a recovering European economy. Subdued growth (1.3% pa) is forecast for the quarrying and mining, and the agriculture, forestry and fishing sectors. Regarding possible further reductions in agricultural employment, PERO highlights the importance of training redundant and previously underemployed agricultural workers with the skills that will enable them to participate in productivity-increasing growth on a sustainable basis, and the creation of an environment that will encourage a restructuring of the rural economy and investment in new, more broad-based, industries.

1.3.5. PRIMARY SECTOR ECONOMIC ACTIVITIES

1.3.5.1 AGRICULTURE

Soil types, topography, water availability and local climatic conditions manifest in the following high potential agro-climatic zones within the Western Cape:

- Major river valleys including the Hex, Breede,

Riviersonderend, Berg and Olifants river valleys being highly suited for both wine and table grape production, as well as vegetable production.

- Elevated basins and river valleys highly favouring stone and pome fruit and recently viticulture production, including the Ceres valley, the Warm and Cold Bokkeveld, the Witzenberg, Piket-bo-Berg, Porterville Mountain, the Elgin-Grabouw and Hemel-en-Aarde valleys, the Koo and the upper Langkloof.
- Extensive arid areas highly suited to small livestock production, including the Groot and Klein Karoo, as well as part of the West Coast.
- Alluvial river valleys (e.g. Olifants, Gouritz and Gamka) favouring fodder (i.e. lucerne), seed and vegetable production.
- Extensive irrigation opportunities in otherwise arid areas including the Sandveld and portions of the Kersvlakte (e.g. Doorn River).
- Commercial forestry on the south-facing slopes of the coastal ranges (i.e. Hottentots Holland, Riviersonderend, Outeniqua, Langkloof and Tsitsikamma Mountains).

Despite the importance of secondary and tertiary economic activities, agriculture remains the backbone of the provincial economy. Farming in the Western Cape covers some 11.5m hectares, and contributes almost 21% of the country's agricultural production. The agricultural sector comprises: 6 682 commercial farmers, 9 844 smallholder farmers, and some 201 230 farm workers Outside the metro region agricultural production and agro-processing of the following products underpins local economies:

- Horticultural products (i.e. apples, pears and



FIG.1.8 WOSA WINE REGIONS



FIG.1.7 DE RUST AND SURROUNDING FARMLANDS

peaches, wine and table grapes, potatoes and unions, citrus; and vegetables) are produced in the Cape Winelands, Cape Metro, West Coast and Overberg.

- Animals and animal products (i.e. poultry, cattle, sheep, ostrich, and pigs) are produced throughout the province.
- Field crops (i.e. wheat, maize, barley) are produced mainly in the Malmesbury, Moorreesburg, Piketberg regions (West Coast) and Caledon and Bredasdorp (Overberg).

Agriculture and the agro-processing industry have substantial competitive advantage in relation to the other provinces and in terms of export growth. The sector is in transition from a reliance on cheap and unskilled labour to one characterised by fewer, more skilled and better paid workers (FARE 2013). "This sector is currently subject to intense structural change which should be navigated carefully in the interests of inclusive growth. Furthermore, the impact of climate change and a potential carbon tax regime in future need to be discounted in efforts to develop this sector. Exports and the development of the local agro-processing industries as a source of local demand for agricultural products should be the focus of developmental policies" (PERO 2013, p80).

1.3.5.2 FORESTRY

Commercial forestry in the Western Cape is in a state of turmoil. In 2001 the national Cabinet decided to exit 45 000ha of commercial forestry in the Boland and Outeniqua by 2020, but reversed this decision in 2008 when it agreed to return half of this land back to forestry. This caused uncertainty in the industry, brought re-planting to a standstill and the resultant shortage in sawlog supplies contributed to the

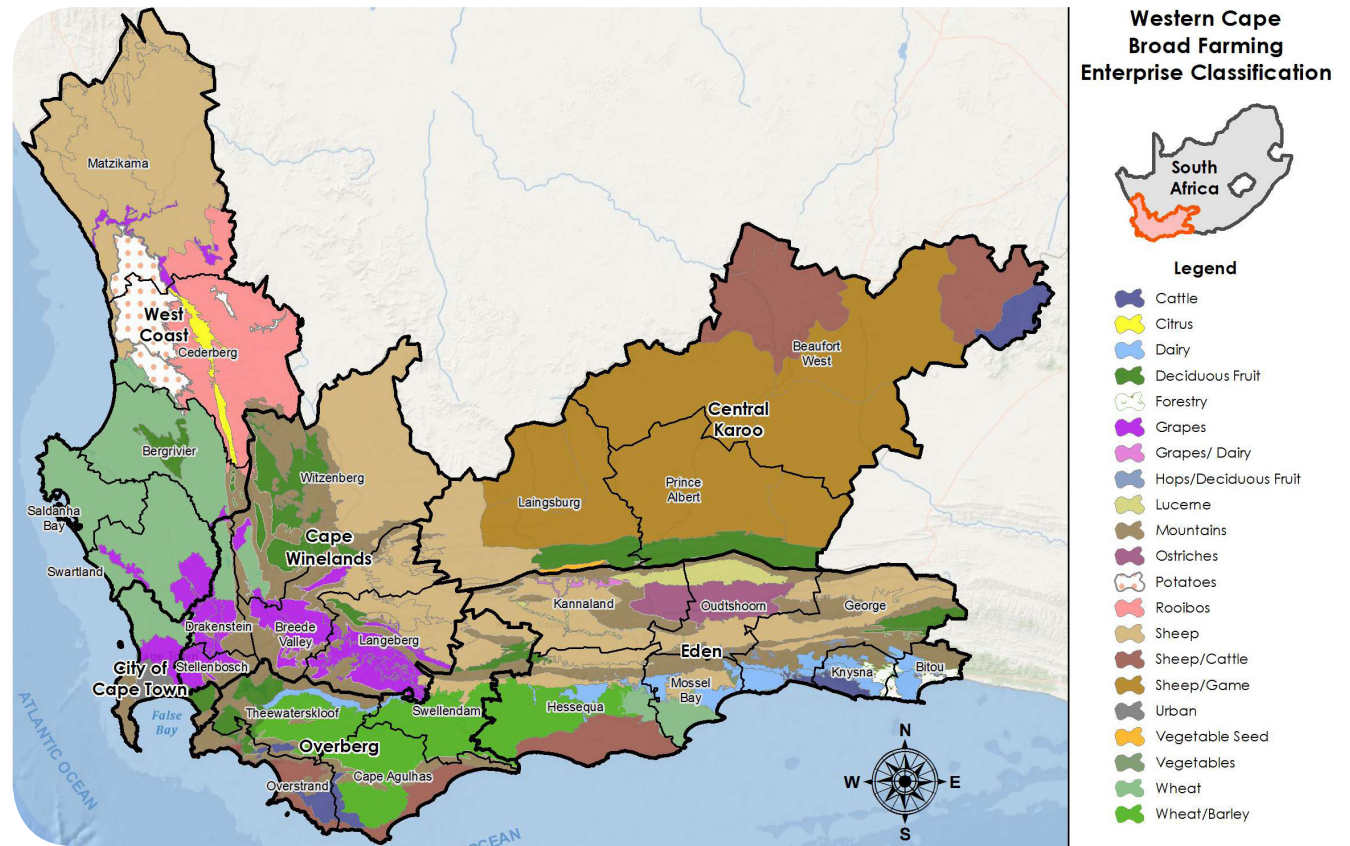


FIG.1.9 BROAD FARMING ENTERPRISE CLASSIFICATION

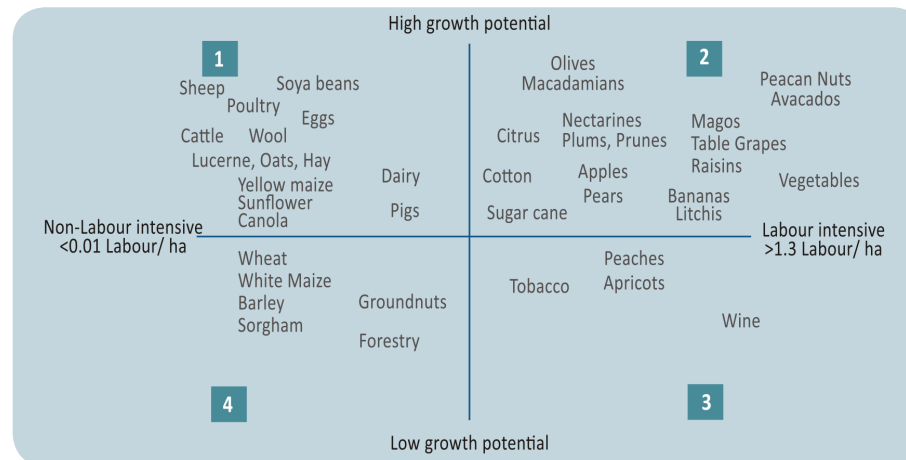


FIG.1.10 AGRICULTURAL GROWTH & EMPLOYMENT POTENTIAL

closure of 11 small independent sawmills. The situation was aggravated by the 2005 wild-fires in the Tsitsikamma region which damaged 14 300 ha of plantations. 22 500ha of plantation land now lies in limbo until the Department of Agriculture, Forestry and Fisheries (DAFF) finds an operator to replant it. Uncertainty also surrounds the alternative use of the remaining 22 500ha that have been exited.

1.3.5.3 FISHING

The Western Cape contributes approximately 90% of the country's fishing revenue and employs approximately 70% of its workforce. Trawling contributes just under half of fish revenues. Historically fishing activity in the province centered predominantly along the West Coast (i.e. from Simons Town to Saldanha), as the cold Benguela current is a rich source of nutrients for fish. Recent reports of declines in West Coast fish stocks have seen fleets moving to the south coast. The Western Cape's fishing harbours are significant but underutilised assets that have redevelopment potential.

NORTH WEST COAST	WEST COAST	SOUTH WEST COAST	SOUTH EAST COAST
Doringbaai	Saldanha	Kalk Bay	Struisbaai
Lambert's Bay	Yzerfontein	Strand	Amiston
Elandsbaai	Cape Town	Gordon's Bay	Mossel Bay
Velddrif	Hout Bay	Kleinmond	Knysna
St Helenabaai	Kommetjie	Hermanus	Plettenberg Bay
Paternoster	Simon's Town	Gansbaai	

TABLE.1.12 HARBOUR TOWNS FOR EACH COASTAL REGION IN THE WCP

1.3.5.4 MINING

Whilst current mining activity is concentrated in the West Coast district, the province's mineral resources are widespread and comprise:

- Rare earths (West Coast).
- Pharmaceutical grade manganese (Overberg, Swellendam)
- Limestone (Breede Valley, Klein Karoo, Piketberg, Van Rhynsdorp).
- Dimension stone and sandstone (Van Rhynsdorp).
- Agricultural lime (Bredasdorp and selected West Coast coastal areas).
- Gypsum for construction material and agri-use (Tankwa Karoo and Knersvlakte).
- Heavy minerals; titanium and zirconium (West Coast).
- Phosphate for agriculture (Langebaanweg).
- Shale-gas (Karoo).
- Uranium (Beaufort West to Murraysburg).
- Construction materials throughout the province.

1.3.6. REGIONAL ECONOMIC PROSPECTS IN DIFFERENT SECTORS

The results of research undertaken for PERO 2013 into the comparative advantages of different economic sectors, indicate a range of development prospects in the various districts (as tabulated below).

Source: CER, presented in PERP 2013, p49

1.3.7. GREEN ECONOMY

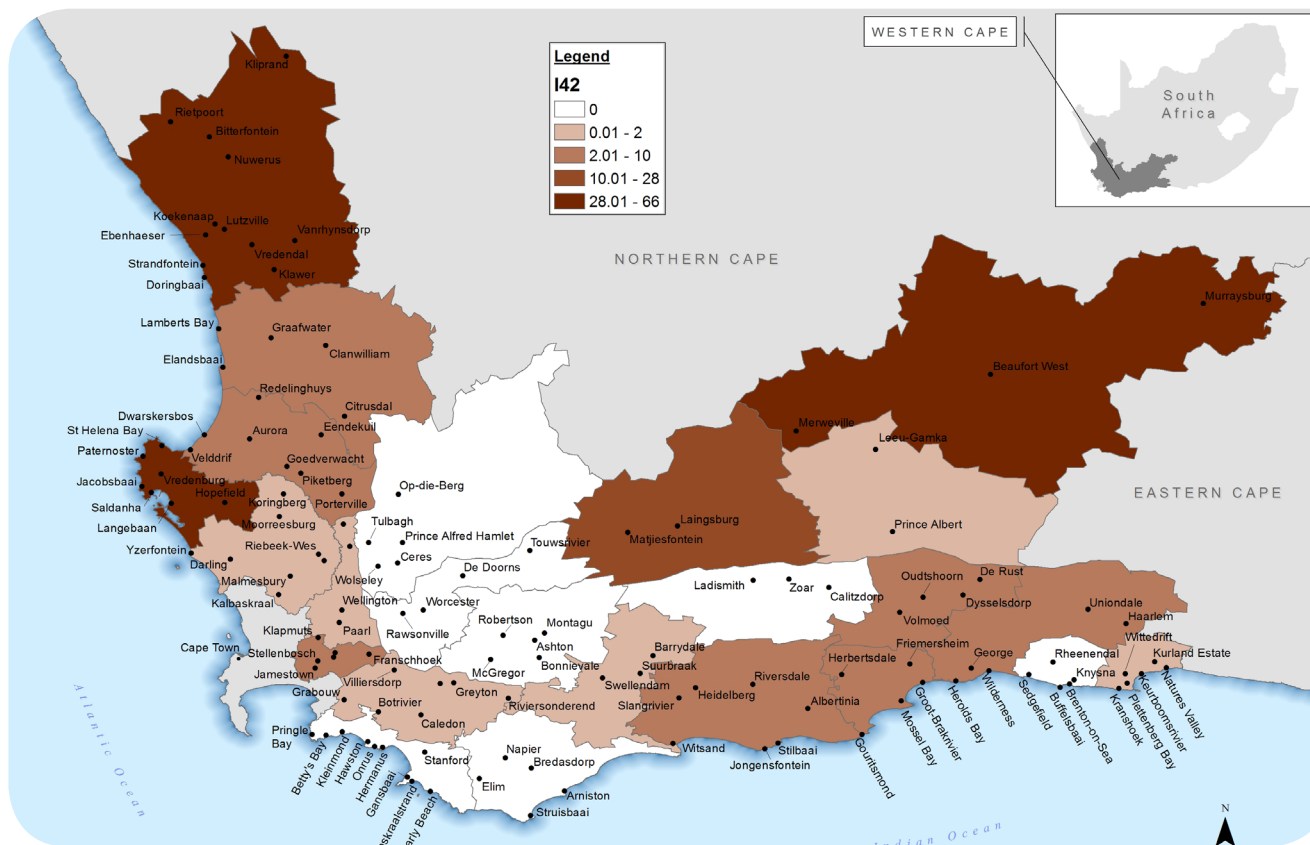
The Western Cape Government is committed to developing a 'green' economy, centred

on investment in new and expanded market opportunities that support a low carbon, resource efficient and socially inclusive economy. Their goal is for the Western Cape to be the lowest carbon province in South Africa, and the leading green economic hub of the African continent. Improving energy and resource efficiencies include efforts to reduce household and business demand for energy (e.g. the construction of green buildings, solar water heating, industrial equipment and the migration from private to public transport). Efforts to ensure environmental sustainability include: generating energy from renewable sources (solar, wind power, biomass); emission and pollution control (e.g. emissions regulation; electric vehicles, etc.); and natural resource management (i.e. the restoration of land, water and soil resources).

The Western Cape has the best wind and wave energy in South Africa, as well as good solar and bio-energy potential. Furthermore, the Province has a strong academic and research base, which can play a key catalytic role in developing, designing and commercialising industrial and household green applications (DEDAT, November 2010).



FIG.1.11 DARLING WINDFARM



1.4. PROFILE OF THE NATURAL ENVIRONMENT

1.4.1. LAND

SANBI's spatial data indicates that in 2009, 21% of the Western Cape landscape was no longer in a natural state (i.e. it had been transformed). Cultivation, covering 19% of the provincial landscape, is the primary cause of transformation. Human settlements cover only 1%, yet are the epicentres of development pressure. 71% of the Western Cape is covered in 'natural' veld, most of it privately owned and much of it used for grazing. Levels of land transformation vary significantly between districts (e.g. Cape Town Metro is 57.7% transformed, whereas Central Karoo is only at 0.6%). Over and above the current agricultural footprint, there is limited land suitable for the expansion of cultivation or grazing.

Remaining 'natural' land is subject to the following development pressures:

- Urban development pressure, which is most acutely felt along the coastal belt, principally in Cape Town Metro, Paarl and Stellenbosch, Saldanha Bay and environs, and the Southern Cape's main centres.
- Pressure to develop low density residential estates, often on the outskirts of urban areas, has tapered off since demand evaporated post the 2008 global financial crisis. With a substantial supply of serviced properties still available, prices are under pressure, many developers cannot afford the land holding costs, and the envisaged municipal rates income has not been forthcoming.
- In farming areas close to domestic consumer markets or land well located to serve export markets, there is ongoing pressure to expand

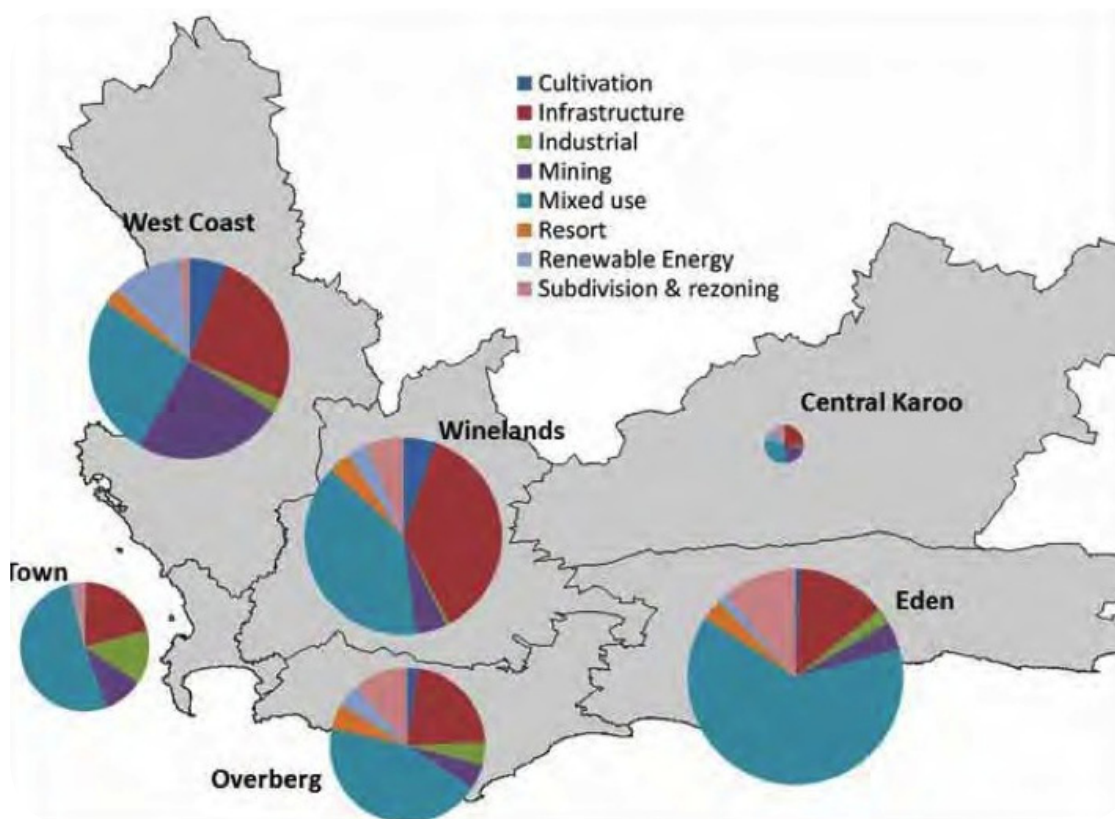


FIG.1.15 TYPE OF DEVELOPMENT APPLICATIONS PER DISTRICT MUNICIPALITY (MAREE AND RALSTON 2012)

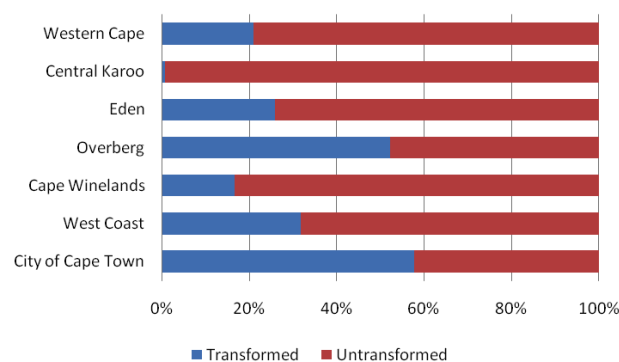


TABLE.1.14 LEVELS OF TRANSFORMATION PER DISTRICT MUNICIPALITY (SANBI 2009)

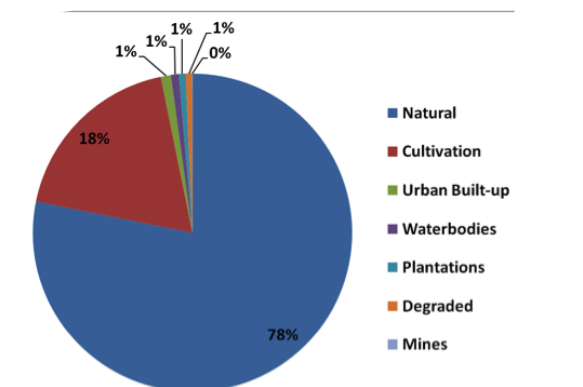


TABLE.1.13 LAND COVER TYPE PERCENTAGES FOR THE WESTERN CAPE (SANBI 2009)

and intensify agriculture, and for mixed land uses. These areas are also targeted by the land reform programme.

- Whilst the province's remaining commercial forestry footprint is small, the limited areas in the S Cape suitable for plantations compete for land with urban growth. The forestry exit areas, however, open up new opportunities for alternative land uses.
- Mining also competes for land, with pressure mainly focused in the West Coast district where the bulk of the province's minerals are extracted. There is also land pressure in proximity to urban centres, where the demand for construction materials is high. Possible future shale gas extraction in the Karoo will introduce new land use pressures.

1.4.2. BIODIVERSITY AND ECOSYSTEM SERVICES

The Western Cape's unique biological diversity underpins livelihoods, the provincial economy (i.e. fishing, farming, agri-industry & tourism sectors), and the provision of ecosystem services (e.g. water purification, crop pollination). The Western Cape's biodiversity assets are significant, particularly the Cape

Floristic Region (1 of 6 global floral kingdoms) and Succulent Karoo biome (most succulent plants for its size in the world). These global biodiversity hotspots have high levels of endemism and unique flora and fauna.

Whilst the actual loss in biodiversity can't be measured, indicators are the loss of natural areas that host valuable species and the level of threat to species. 22% of the Western Cape's terrestrial landscape has been completely transformed, mostly in the lowland areas. Of the 21 ecosystems deemed critically endangered, only 11 are formally protected. Many critically endangered vegetation types have less remaining spatial extents than what is required to meet conservation targets.

Land transformation (i.e. conversion from natural to manmade landscapes) is the primary cause of biodiversity loss and deteriorating eco-systems health. The main threat is in the lowlands, particularly in areas intensively cultivated and subject to urban growth pressures (e.g. Cape Winelands District and City of Cape Town). Climate change is predicted to be a major long-term threat to biodiversity, as it is likely to cause a shift in species distribution

with the Succulent Karoo biome most at threat. There has also been an increased frequency and shifts in the fire season, which impacts negatively on biodiversity.

70% of all freshwater fish, 13% of plants, 10% of mammals and 5% of reptiles and birds are considered threatened. Of particular concern is the vulnerable status of the Western Cape's freshwater fish and plants. Over abstraction and modification of natural water courses is altering flow regimes, which impacts on species migration and breeding, aquatic habitats, food resources, and wetland ecosystems. In modified and degraded areas, alien invasive species are out-competing indigenous plants for natural resources.

To stem the loss of biodiversity sufficient and suitable habitat for threatened species needs to be secured, as delineated in the Western Cape's Critical Biodiversity Area (CBA) mapping. CapeNature's conservation efforts are focused on achieving spatial continuity and connectivity of the province's biodiversity network to strengthen its resilience. Good progress has been made with extending the protected areas network, and the Biodiversity

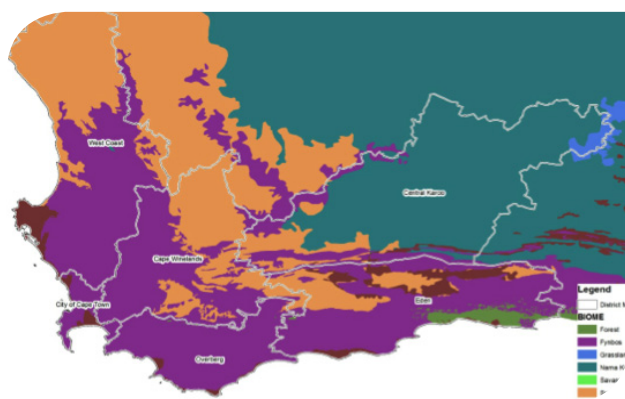


FIG.1.16 BIOMES OF THE WESTERN CAPE (SANBI 2011)

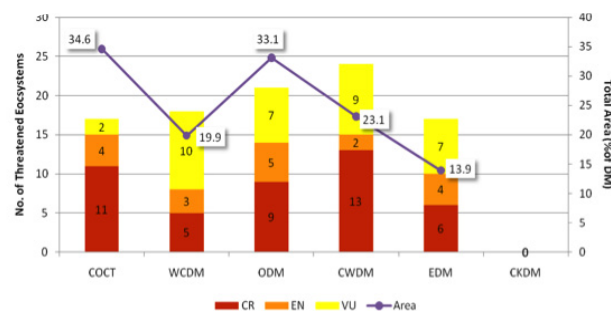


TABLE.1.15 NUMBER OF THREATENED TERRESTRIAL ECOSYSTEMS AND TOTAL AREA AS A PERCENTAGE OF EACH DISTRICT MUNICIPALITY OF THE WESTERN CAPE PROVINCE (SANBI 2011)

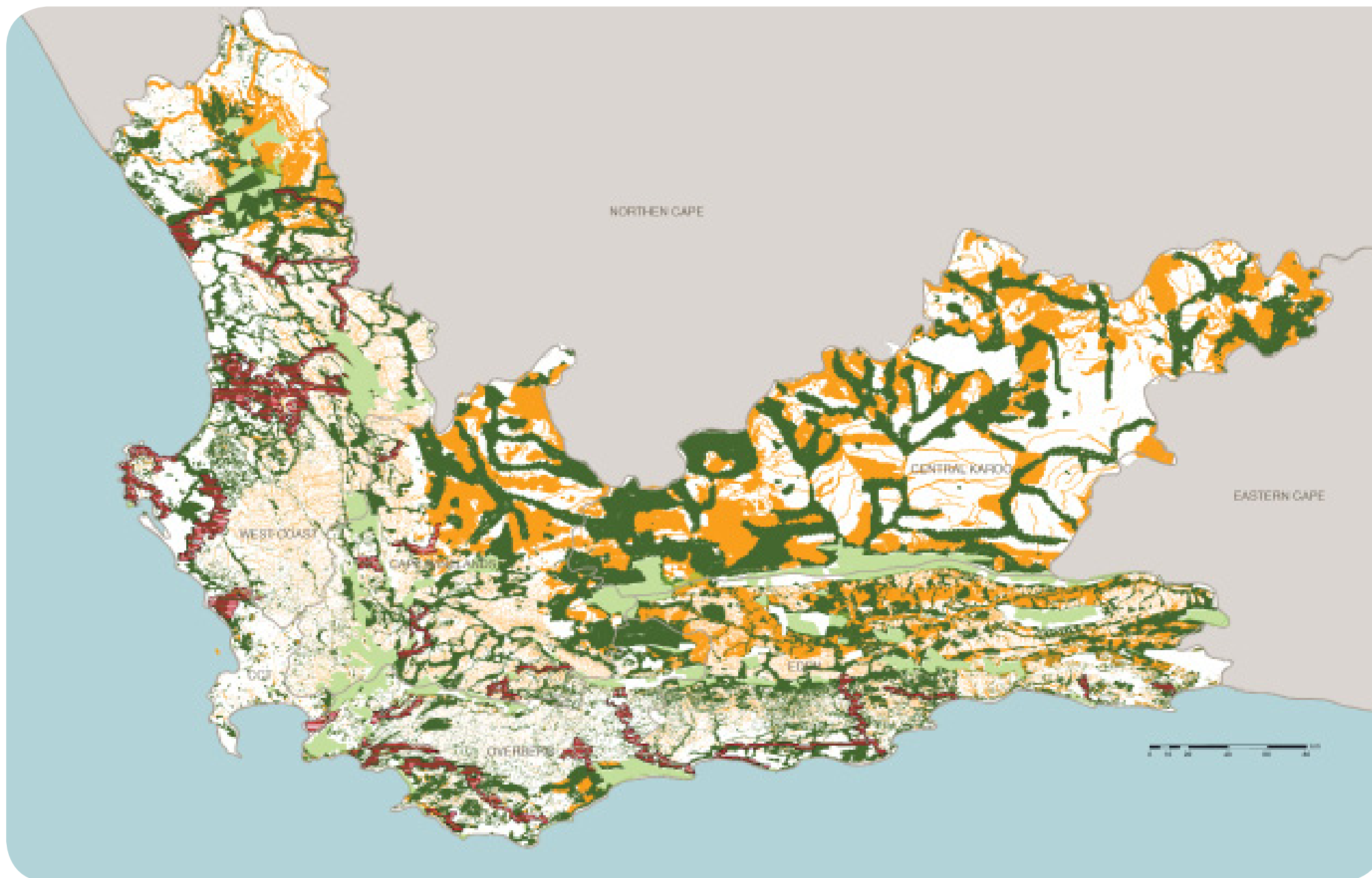


FIG.1.17 BIODIVERSITY AREAS, PROTECTED AREAS AND THE DRAFT PRIORITY CLIMATE CHANGE CORRIDORS AT A PROVINCIAL SCALE

- | | |
|---|--|
| ■ PROTECTED AREAS | ■ CRITICAL BIODIVERSITY AREAS |
| ■ DRAFT PRIORITY CLIMATE CHANGE ADAPTION CORRIDORS (TABLE MOUNTAIN FUND) | ■ ECOLOGICAL SUPPORT AREAS |

Stewardship Programme has increased the Western Cape's conservation footprint to 26.9%. As funding constraints limit further land acquisition, innovative ways are needed to incentivise private landowners to contribute to the Western Cape's biodiversity network.

1.4.3. SCENIC RESOURCES AND LANDSCAPES

The landscape and scenic qualities of the Western Cape are informed by the mountain ranges, escarpments, foothills, valleys and coastal plains formed by the underlying geology of the region. At the regional scale the landscapes of the Western Cape can be grouped into the following zones: the Cape West Coast; the Cape Metropolitan area; the Cape Winelands; the Overberg; Eden, and the Central Karoo.

The Western Cape is experiencing incremental erosion and fragmentation of its unique rural landscapes. Agriculture is being reduced to 'islands', visual cluttering of the landscape by non-agricultural development is prevalent, and rural authenticity, character and scenic value is

being eroded (e.g. Cape Winelands sprawl).

It is significant to note that only 12 sites have been declared since 1999 under NMA. This lack of protection as well as the absence of a 'complete' inventory of heritage and scenic resources within the Western Cape means that 65 cultural landscapes (palaeontological, archaeological and rural landscapes) worthy of protection are not currently protected. Threats include:

- Incremental destruction of coastal archaeology
- Vandalism of rock art sites (E.g. graffiti at Baboon Point, Elands Bay, and Peers Cave, Cape Town)
- Erosion and disturbance of coastal sites by off-road vehicular and pedestrian traffic
- Loss of wilderness 'pre-colonial' landscape settings. e.g. Elands Bay Cave graffiti

Lack of adequate information and proactive systems is an overarching issue driven by a number of factors, including:

- Imbalance in the list of formally protected heritage resources reflecting a narrow view of the diverse heritage and history of the Province.
- Too little emphasis on areas outside Cape Town and Cape Winelands, (e.g. Karoo and West Coast potentially becoming a 'dumping ground').
- Absence of a consolidated database and GIS mapping of heritage and scenic routes for the province (i.e. expanding this basic inventory at a municipal level).
- Inefficiency within the current heritage approval system, e.g. Section 34 NHRA applications for alterations to structures older than 60 years requiring HWC approval.
- Limited enforcement capacity within outlying urban and rural areas in terms of the provisions of the NHRA.

1.4.4. INLAND WATER

Water is needed to grow and develop the provincial economy, as well as sustain people



FIG.1.18 SWARTBERG MOUNTAIN PASS



FIG.19 ROUTE 62

and livelihoods. The Western Cape is supplied mainly by the Gouritz, Olifants/Doorn, Breede and Berg Water Management Areas (WMAs). All WMAs, except Breede, have a negative water balance. Surface water resources, currently the W Cape's primary source, are unevenly distributed, currently used to their limits, and offer few opportunities for more dams.

The availability of water is a major determinant of how intensively land is used. Inter-basin transfers are used to address deficits in water scarce areas (e.g. in Cape Town Metro and Saldanha). Groundwater quality is generally good, notwithstanding areas where the water is saline and localised over abstraction in some farming areas. Only 6% of the Western Cape's rivers are in a natural condition, and 14% are classified in a poor condition. Spatially there is a correlation between intensity of land use and ecosystem health (e.g. river systems in the Berg WMA, which serves more than 80% of consumers, have been compromised by urban and agricultural run-off and effluent).

Given quantity and quality constraints, the Western Cape SOE report rates the outlook for the province's inland water as declining.

1.4.5. OCEANS & COASTS

The province's coastal assets include fisheries resources, kelp, penguin and seal colonies, fynbos and indigenous coastal forests – all of which underpin livelihoods and the fishing and tourism industries. Other coastal economic activities include shipping, nature and heritage based tourism, commerce, manufacturing and agriculture.

Coastal water quality, based on monitoring at Blue Flag Beaches, shows an acceptable state and is improving. Estuaries are generally in

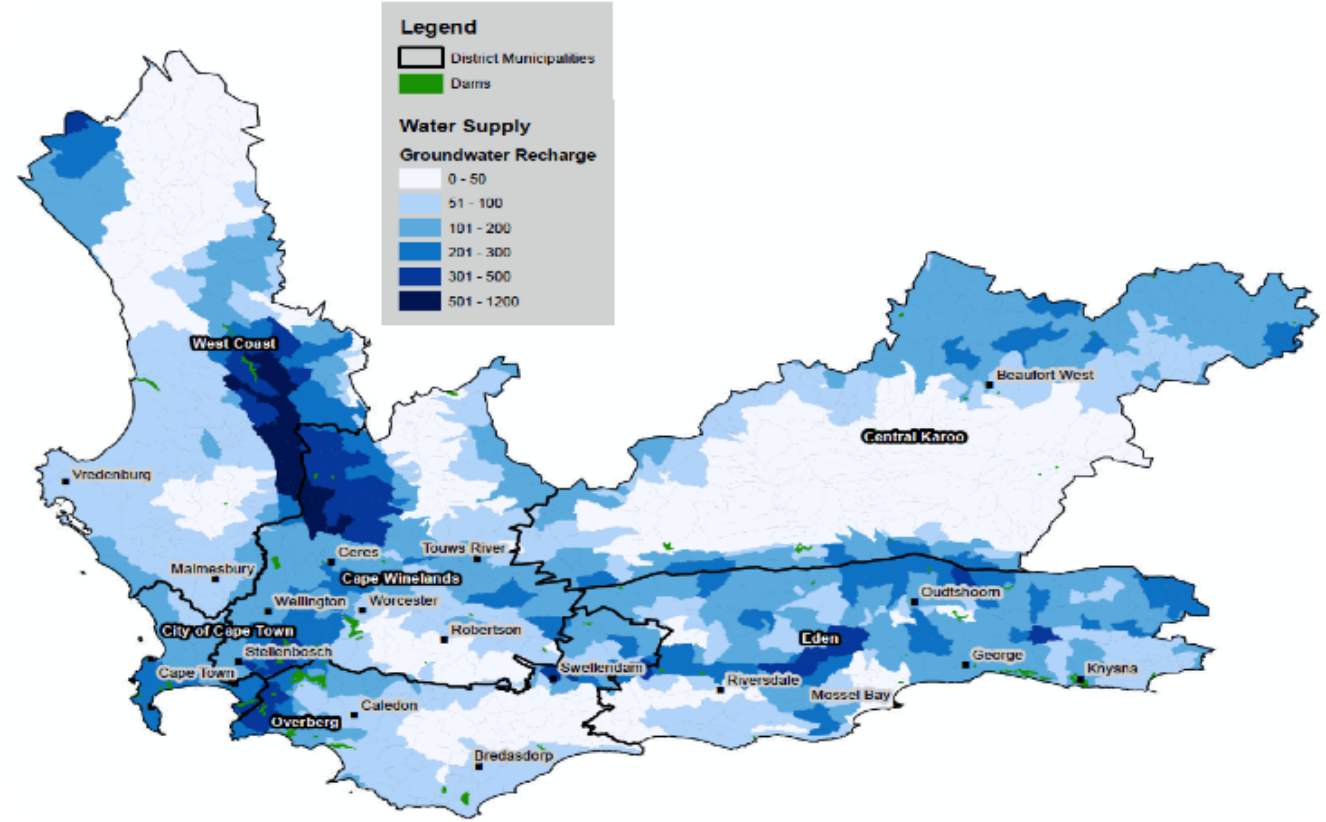


FIG.1.20 HIGH GROUNDWATER RECHARGE AREAS, SHOWN IN M3/ANNUM (2011)

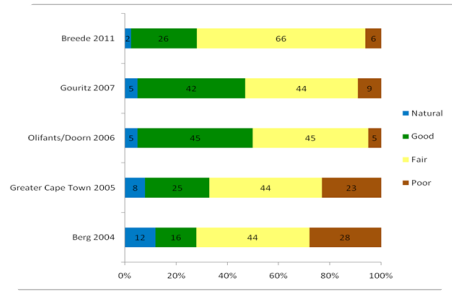


TABLE.1.16 CONSOLIDATED RIVER HEALTH ECOSTATUS ASSESSMENT RESULTS REFLECTING PRESENT ECOLOGICAL STATE OF THE WESTERN CAPE PROVINCE (RHP 2004, 2005, 2006, 2007 AND 2011)

WMAs	2000			2005		
	Water supply (million m3 per annum)	Water use (million m3 per annum)	Balance (million m3 per annum)	Water supply (million m3 per annum)	Water use (million m3 per annum)	Balance (million m3 per annum)
Berg	676	704	-28	709	745	-36
Breede	865	828	37	1090	1071	19
Gouritz	275	339	-64	351	415	-64
Olifants / Doorn	338	373	-35	372	406	-34
Provincial total			-90			-115

TABLE.1.17 A COMPARISON OF THE OVERALL WATER RESOURCE SUPPLY AND CONSUMPTION BETWEEN 2000 AND 2005, PER WATER MANAGEMENT AREA (DEADP 2005; DEADP 2012A)

poor health, highly modified and under threat. Conservation of the coastal zone is improving with 8 Marine Protected Areas (MPAs), but their management effectiveness varies. Marine ecosystems are under threat with West Coast nearshore, Eden & Overberg offshore and the Continental shelf edge critically endangered habitats, and Langebaan and Cape Agulhas are endangered habitats. Transformation of the coastline is of particular concern given the loss of 14% of threatened ecosystems between 2001 and 2009. This is mostly a result of human activity.

As it is a desirable location for settlement, diverse economic activities, harvesting of natural resources, and recreation, the coastal zone is subject to increasing pressures. Impacts arising from these pressures include reduced productivity of coastal ecosystems (which compromises its economic value), and disrupted coastal dynamics which increases environmental risks (e.g. mobile sand dunes) and decreases the ecosystem's resilience. Sea level rise, and its interaction with increasing

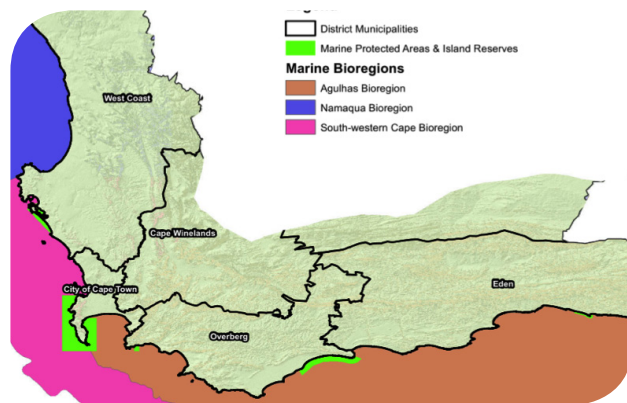


FIG.1.23 MARINE BIOREGIONS (SANBI 2011)

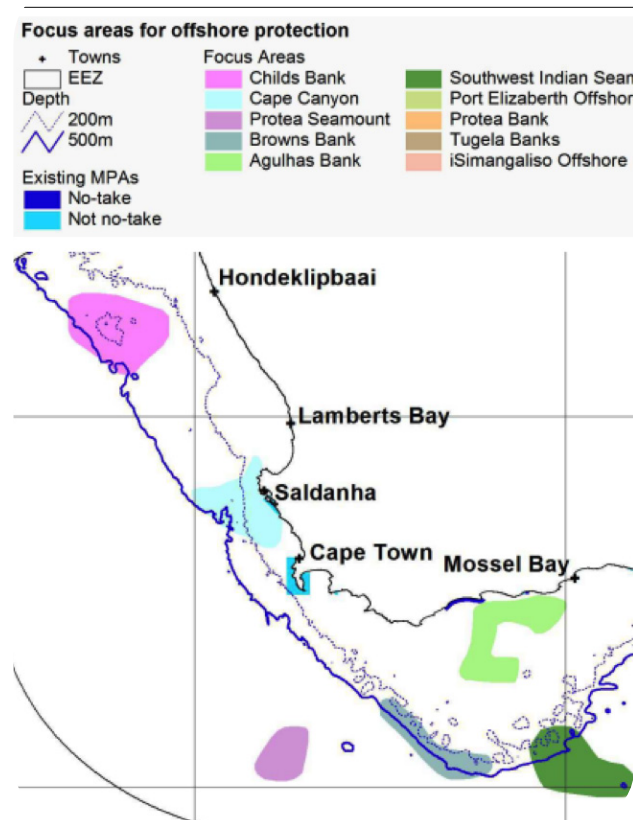


FIG.1.22 FOCUS AREAS FOR OFFSHORE PROTECTION (ADAPTED FROM SINK ET AL. 2012)



FIG.1.21 CAPE TIMES ARTICLE (MAY 2013)

storm frequencies, intensities, and wind velocities, presents a significant challenge in the years ahead.

1.4.6. AIR QUALITY

Human activities are the primary determinant of atmospheric air quality. The Western Cape's Mediterranean climate also determines the characteristics and spread of air pollution, and the province's varied topography creates microclimates through interactions between the coastal zone, mountain obstructions and land use patterns. Pressures on air quality emanate from:

- Transportation - mainly vehicle emissions, but also ports and airports.
- Industrialisation
- Domestic fuel burning – leading to in-door air pollution
- Fires, agriculture, mining, waste water treatment works, and landfill sites.

The status of air quality in the different districts is as follows:

- Cape Town Metro – where most of the province's emissions (all parameters) are generated, and where the highest levels of exposure to poor air quality is. The main pollution sources are industrial activities and vehicle emissions.
- Cape Winelands District – high particulate matter and nitrogen dioxide concentrations related to industrial and agricultural activities, as well as vehicle emissions. Conflicts between residential land uses and crop spraying.
- Central Karoo District – most emissions emanate from overland transport (i.e. diesel and petrol use) and domestic fuel burning.

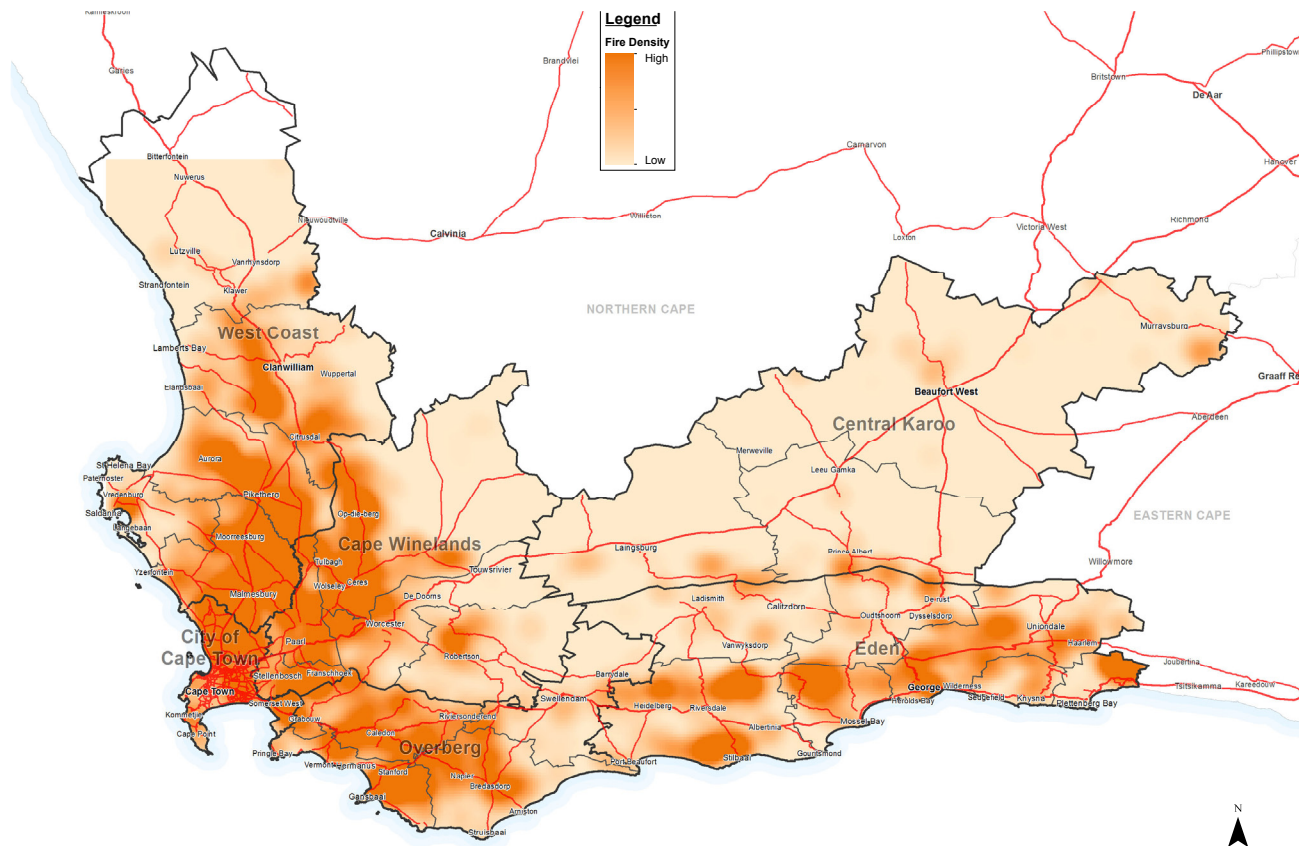


FIG.1.25 DENSITY OF FIRES IN THE WESTERN CAPE (PGWC 2013)

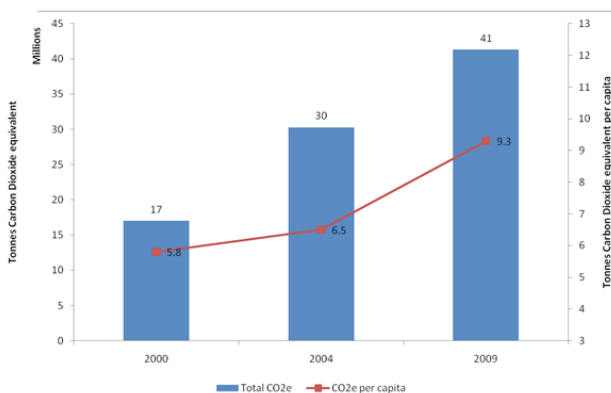


TABLE.1.19 WESTERN CAPE EMISSIONS AS TOTAL AND PER CAPITA CARBON DIOXIDE EQUIVALENT (DEADP 2005; DEADP 2007; WCG 2013)

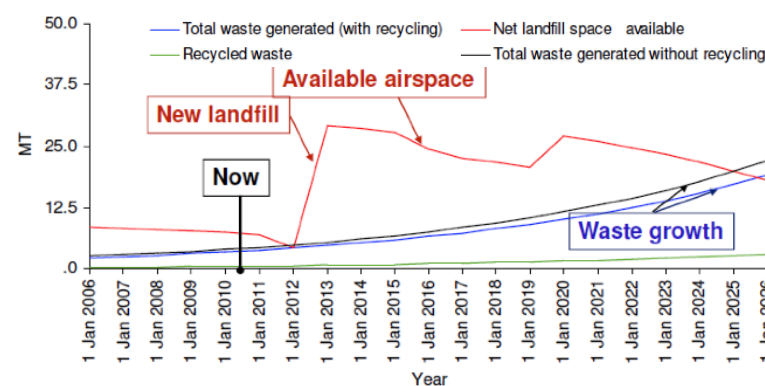


TABLE.1.18 AVAILABLE LANDFILL AIRSPACE IN CAPE TOWN (MULLER 2012)

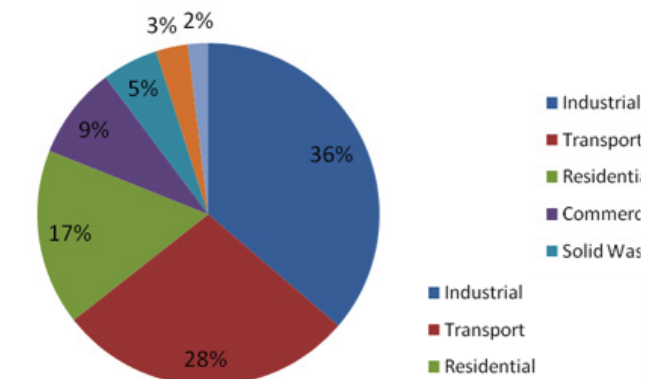


TABLE.1.20 WESTERN CAPE ENERGY AND WASTE-RELATED GHG EMISSIONS BY SECTOR FOR 2009

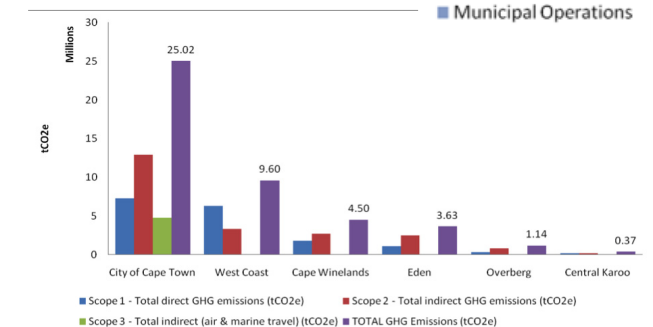


TABLE.1.21 ENERGY- AND WASTE-RELATED GHG EMISSIONS BY SCOPE PER DISTRICT



FIG.1.24 THE WESTERN CAPE CLEAN-UP OPERATION AREAS - INITIATED IN 2001

Possible future extraction of uranium and shale gas resources would significantly escalate emissions.

- Eden District – emission concentrations at PetroSA and Oudtshoorn tanneries and abattoirs, and high consumption of petroleum fuels along the national road network.
- Overberg District – emissions here are associated with fishing, forestry and agricultural industries, vehicle emissions, and domestic fuel burning.
- West Coast District – the main source of greenhouse gas emissions is coal burning (by industry in Saldanha Bay area) and the use of fossil fuels. Dust emissions from iron ore handling at Saldanha and West Coast mines are local issues.

1.4.7. CLIMATE CHANGE

The earth's climate systems have demonstrably changed since the pre-industrial era. Scientific consensus is that the warming trend of the past 5 decades is attributable to human transformation of the earth's surface and atmosphere through carbon emissions. As there is a lag between human transformations and the response from the climate system, we are locked into the impacts of past decades irrespective of how drastic mitigation efforts now are.

Expected changes to the Western Cape's climate are: higher mean annual as well as maximum and minimum temperatures; general decrease in rainfall; increased severity of drought; increased intensity of extreme events; and increased mean sea level (5cm rise over 25 years). Predicted impacts of these changes are:

1. Biodiversity – change in the distribution of

biomes and decline in species distribution and diversity.

2. Water – decline in surface and groundwater resources, compromised aquatic ecosystems, and increased probability of salt water intrusion into estuaries and coastal aquifers.
3. Agriculture – reduced soil and water quality, increase in weeds, pests and disease, and reduced production (viticulture, deciduous fruit & dryland cultivation most at risk).
4. Tourism – damage to infrastructure from extreme events, and altered 'sense of place'.
5. Fisheries – shifts in nursery and breeding areas, and changes to land based processing (e.g. decline of W Coast fisheries).
6. Social – direct impacts: extreme climatic events; lower agricultural productivity; changes to distribution of diseases; elderly and poor most vulnerable. Indirect impacts: decreased food security; loss of livelihoods; deterioration of social welfare; and rural out-migration.

A key challenge moving forward is to devise effective adaptation and mitigation responses, especially for vulnerable municipalities. Focus areas for adaptation are:

- Energy efficiency & demand management
- Renewable energy
- Sustainable public transport systems
- Water conservation & demand management
- Built environment adaptation
- Ecosystem based adaptation



FIG.1.26 HOUSING AND FLOODING IN POOR ENVIRONMENTS OUTSIDE STELLENBOSCH



FIG.1.27 STORMS ALONG THE ATLANTIC COAST



FIG.1.28 STORMS ALONG THE ATLANTIC COAST

1.5. PROFILE OF THE BUILT ENVIRONMENT

1.5.1. INFRASTRUCTURE SYSTEMS

Infrastructure enables socio-economic development, it does not create it. The demand for infrastructure in the Western Cape is determined by both the pace of economic growth and also its nature (i.e. expanding sectors may require traditional infrastructure (e.g. modern port facilities) or new infrastructure (e.g. broadband linkages)). On the supply side, the strength of the economy influences the resources available to improve and maintain infrastructure. The Western Cape is heavily reliant upon the infrastructure spending and programmes of national departments and of the state-owned enterprises (i.e. for electricity, rail, national roads, ports, air transport and telecommunications).

Infrastructure is long term by nature. The Western Cape Infrastructure Framework (WCIF 2013) reports that the province is generally well served with infrastructure, however some areas still have low or very low availability levels. Some municipal systems suffer from inefficient management and use of resources. The status of the province's infrastructure systems is as follows:

1.5.1.1 ENERGY

Western Cape energy use has grown by approximately 9.3% between 2004 and 2009. Cape Town is understandably the heaviest energy user, but the sparsely populated West Coast is the second highest user on account of its energy-intensive heavy industries. As there is an enormous reliance on fossil fuels in the province, this translates into the release of greenhouse gases. Transport (52%) and industry

(34%) are the main W Cape energy users. The built environment sector (i.e. households, commerce and services) only consumes 13% of total energy. Electrical distribution infrastructure is well established, has good coverage, and is in a reasonable condition. Current deficits and uncertainties lie in the generation and sourcing of electricity capacity. The provincial energy focus is on lowering carbon emissions, local generation (e.g. renewable, and greater use of gas).

1.5.1.2 WATER & SANITATION

The availability of water resources is the province's critical issue. Water resources infrastructure is at risk and not coping with demand. Poor river water quality poses a threat to the agricultural economy. Many of the waste water treatment works need to be upgraded. Sanitation coverage is advanced, except in informal settlements where the lack of infrastructure leads to health and environmental risks.

1.5.1.3 TRANSPORT

The province has a well-developed transport network (i.e. airports, ports, roads and public transport, and rail lines). Port expansion is required in Cape Town and Saldanha in response to local and international markets, and as economic catalysts. The paved-road network is adequate, but the gravel network needs attention and road maintenance in general is underfunded. Rail freight lines have adequate capacity, but are hampered by operational inefficiencies. Passenger rail, particularly in Cape Town, has suffered from historical underinvestment. The larger urban areas require more efficient and broader-reaching public transport systems.

1.5.1.4 SOLID WASTE

Between 2001 and 2010 the volume of waste generated in the W Cape increased by some 18% per annum, far exceeding the rate of population and economic growth. 70% of the province's waste is generated in Cape Town Metro, but its relative contribution is falling. There are 193 operational facilities, including 92 general waste disposal sites, 54 drop-offs, 15 transfer stations and 13 materials recovery facilities. Whilst 6 new regional waste disposal sites are planned, securing suitable land is proving difficult and costs are prohibitive. Intermediate storage, sorting and recovery facilities offer opportunities for recyclable waste to be diverted out of the waste stream. Vissershok and the PetroSA facility next to Moss gas are the only sites used for hazardous waste disposal, and only 3 incinerators are operational. Whilst the challenge varies across the province, the shortage of landfill space is a common problem.

1.5.1.5 INFORMATION & COMMUNICATION TECHNOLOGY (ICT)

Whilst access to mobile communication has increased rapidly, internet access has been stagnant. It is the strategy of Provincial Government that every citizen in the Western Cape has access to affordable high speed broadband, has the necessary skills to use it, and uses it in their daily lives. Broadband's roll-out is being phased:

- An initial backbone is being developed that links all provincial government buildings
- Wireless mesh networks are being piloted in municipalities (i.e. Khayelitsha/Mitchells Plain networks have been planned and the feasibility of Knysna & Bitou is being assessed)

- Public ICT access will be provided within a 2 km radius of anyone by 2019.
- Higher connection speeds will be made available to businesses.

1.5.2. HUMAN SETTLEMENTS

1.5.2.1 SETTLEMENT HIERARCHY

Accommodating the overwhelming majority of the provincial population and as the home of the province's economic 'engine', Cape Town overwhelmingly dominates the Western Cape settlement hierarchy. Current growth trends as well as demographic and economic forecasts all point to Cape Town's primacy enduring. To understand the status and prospects of the 131 settlements outside of Cape Town, the Western Cape Government commissioned the Growth Potential Study (GPS). The original study was done in 2004, it was updated in 2010, and in 2013 it was again updated to incorporate the results of the 2011 Census. The GPS investigation assessed and rated the development status of all Western Cape municipalities and towns in terms of five development attributes, namely: human capital, infrastructure availability, economy, physical attributes, and institutional capacity. On the assumption that these 5 attributes are prerequisites for future development, the GPS study also rated growth potential on the basis of a composite of the 5 development status indices.

1.5.2.2 ROLE AND FUNCTION OF SETTLEMENTS

The 2010 GPS classification and rating of the province's settlements as follows:

- Regional centres, which generally rate highly in terms of all 5 development attributes.
- Agricultural service centres, these traditional

central places scored lower scores on the 5 development attributes.

- The fishing/industrial settlements, which were generally classified as having medium to high overall development potential.
- Residential settlements, where social needs are mainly within the high to very high range, and with low to medium levels of development potential.
- Tourism settlements, which have a wide range of development potential, ranging from low to high and are generally characterised by low or very low levels of social needs.

- A concerning finding of the 2010 GPS study was that 36% of Western Cape settlements have a dormitory function, which places their sustainability at risk.

1.5.2.3 SETTLEMENT INDICES

The results for each of these settlement indices are mapped and the GPS ratings of the growth potential of the province's 131 settlements are presented in histogram format (see following images)

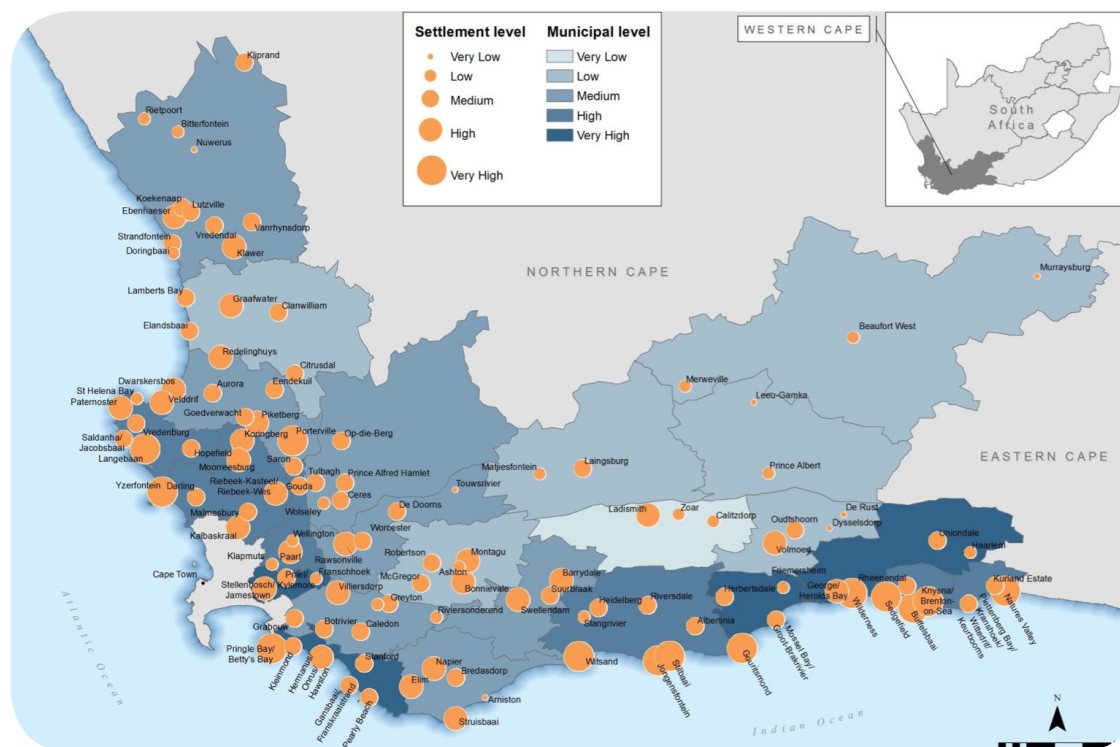


FIG.1.29 GPS HUMAN CAPITAL INDEX PER TOWN

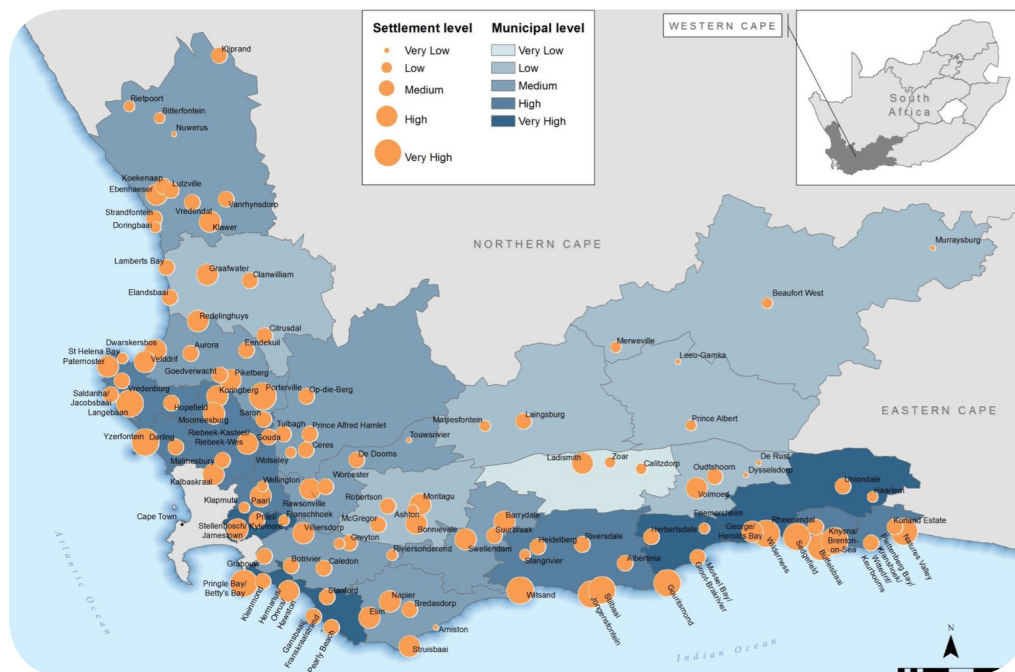


FIG.1.30 GPS ECONOMIC INDEX PER TOWN

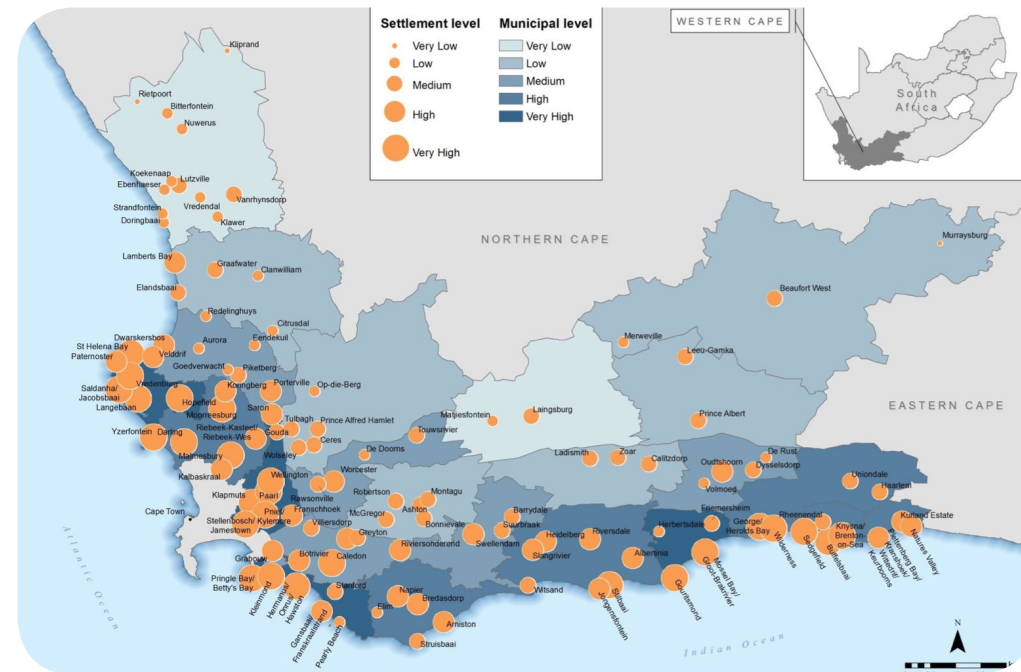


FIG.1.32 GPS INFRASTRUCTURE INDEX PER TOWN

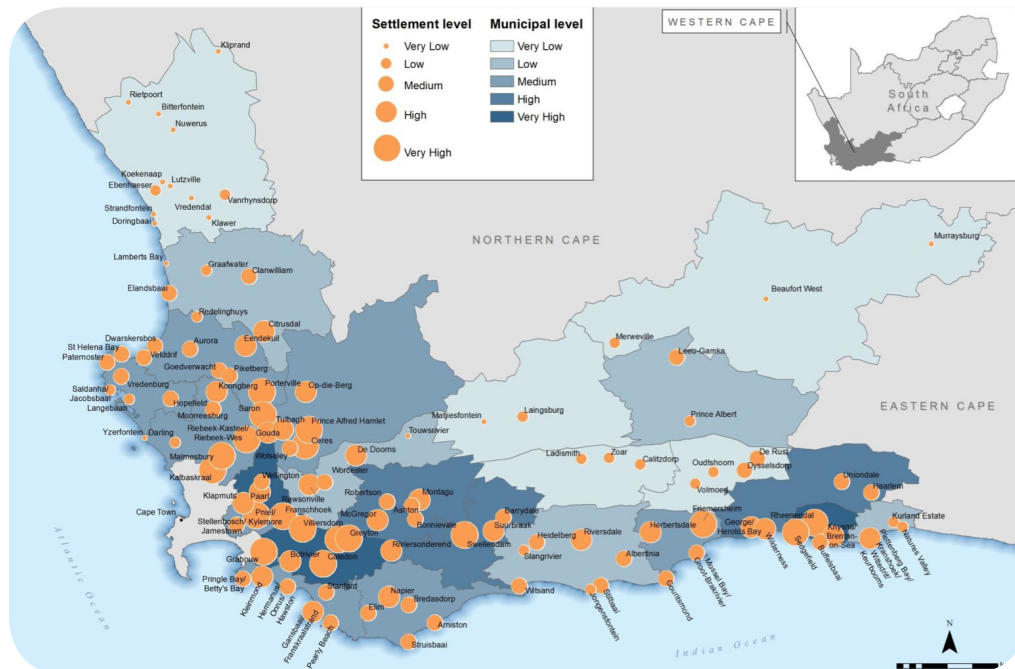


FIG.1.31 GPS PHYSICAL INDEX PER TOWN

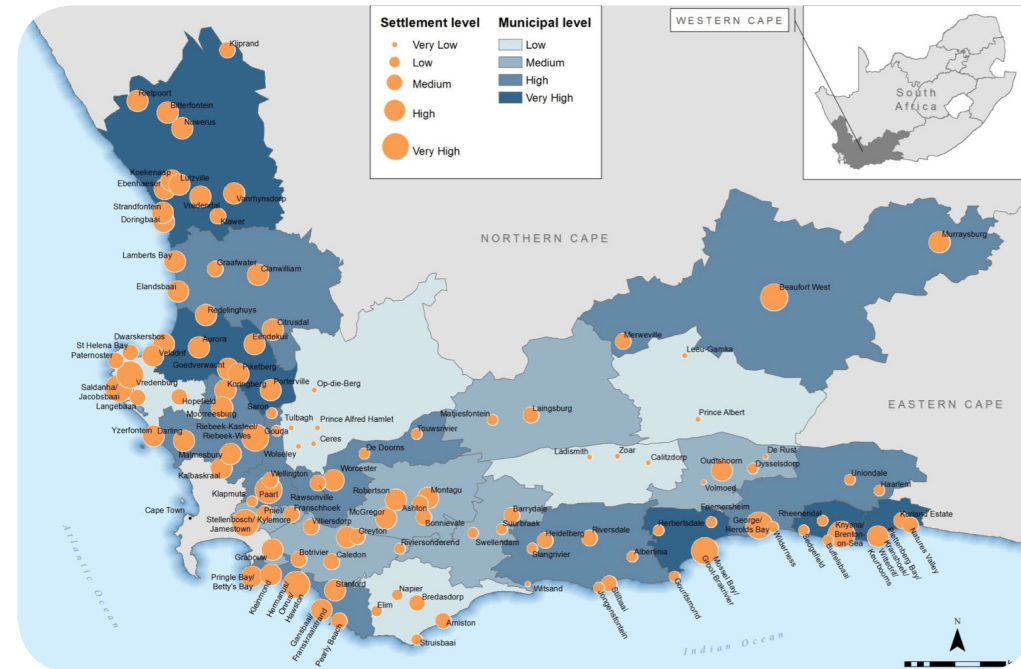


FIG.1.33 GPS INSTITUTIONAL INDEX PER TOWN

1.5.2.4 URBAN INFORMALITY & EXCLUSIONARY URBAN LAND MARKETS

		Municipality level classification (the municipality of each settlement is shown in parenthesis)				
		Very low	Low	Medium	High	Very high
Settlement level classification (the municipality of each settlement is shown in parenthesis)	Very low	Calitzdorp (Kannaland) Leeu Gamka (Prince Albert) Matjiesfontein (Laingsburg) Merweville (Beaufort West) Murraysburg (Beaufort West) Prince Albert (Prince Albert) Zoar (Kannaland)	Bitterfontein (Matzikama) De Rust (Oudtshoorn) Doringbaai (Matzikama) Dysselsdorp (Oudtshoorn) Kliprand (Matzikama) Nuwerus (Matzikama) Rietpoort (Matzikama) Strandfontein (Matzikama) Volmoed (Oudtshoorn)	Touwsrivier (Breede Valley)		
	Low	Beaufort West (Beaufort West) Ladismith (Kannaland) Laingsburg (Laingsburg) Op-die-Berg (Witzenberg) Tulbagh (Witzenberg) Wolseley (Witzenberg)	Citrusdal (Cederberg) Clanwilliam (Cederberg) Ebenhaeser (Matzikama) Graafwater (Cederberg) Klawer (Matzikama) Koekenaap (Matzikama) Lamberts Bay (Cederberg) Lutzville (Matzikama) Vanrhynsdorp (Matzikama) Vredendal (Matzikama)	Arniston (Cape Agulhas) Aurora (Bergrivier) De Doorns (Breede Valley) Elim (Cape Agulhas) Goedverwacht (Bergrivier) Redelinghuys (Bergrivier) Slangrivier (Hessequa) Suisbaai (Cape Agulhas) Suurbraak (Swellendam) Witsand (Hessequa)	Kurland (Bitou) Pearly Beach (Overstrand)	Haarlem (George) Herbertsdale (Mossel Bay) Uniondale (George)
	Medium	Prince Alfred Hamlet (Witzenberg) Ceres (Witzenberg)	Elandsbaai (Cederberg) Oudtshoorn (Oudtshoorn)	Albertinia (Hessequa) Ashton (Langeberg) Barrydale (Swellendam) Bonnievale (Langeberg) Bredasdorp (Cape Agulhas) Dwarsersbos (Bergrivier) Eendekull (Bergrivier) Gouritsmond (Hessequa) Jongensfontein (Hessequa) Heidelberg (Hessequa) McGregor (Langeberg) Montagu (Langeberg) Napier (Cape Agulhas) Piketberg (Bergrivier) Rawsonville (Breede Valley) Riversdale (Hessequa) Robertson (Langeberg) Swellendam (Swellendam) Veldrift (Bergrivier)	Botrivier (Theewaterskloof) Darling (Swartland) Genadendal (Theewaterskloof) Greyton (Theewaterskloof) Hopefield (Saldanha Bay) Koringberg (Swartland) Nature's Valley (Bitou) Paternoster (Saldanha Bay) Riviersonderend (Theewaterskloof) Saldanha/Jacobsbaai (Saldanha Bay) St Helena Bay (Saldanha Bay) Stanford (Overstrand) Villiersdorp (Theewaterskloof) Yzerfontein (Swartland)	Buffelsbaai (Knysna) Franschoek (Stellenbosch) Friemersheim (Mossel Bay) Gouda (Drakenstein) Klapmuts (Stellenbosch) Rheenendal (Knysna) Saron (Drakenstein) Wellington (Drakenstein)
	High			Porterville (Bergrivier) Stilbaai (Hessequa) Worcester (Breede Valley)	Caledon (Theewaterskloof) Gansbaai/Franskraalstrand (Overstrand) Grabouw (Theewaterskloof) Kalbaskraal (Swartland) Kleinmond (Overstrand) Langebaan (Saldanha Bay) Moorreesburg (Swartland) Plett/Kranshoek/Wittdrif/Keur (Bitou) Riebeeck-Kasteel/Riebeeck-Wes (Swartland)	Pniel/Kylemore (Stellenbosch) Sedgefield (Knysna) Wilderness (George)
	Very high			Betty's Bay/Pringle Bay (Overstrand) Hermanus/Onrus/Hawton (Overstrand) Malmesbury (Swartland) Vredenburg (Saldanha Bay)	George/Heroldsbaai (George) Knysna/Brenton-on-sea (Knysna) Mosselbaai/Groot Brak (Mossel Bay) Paarl (Drakenstein) Stellenbosch/Jamestown (Stellenbosch)	

TABLE.1.22 GPS COMPOSITE GROWTH POTENTIAL HISTOGRAM

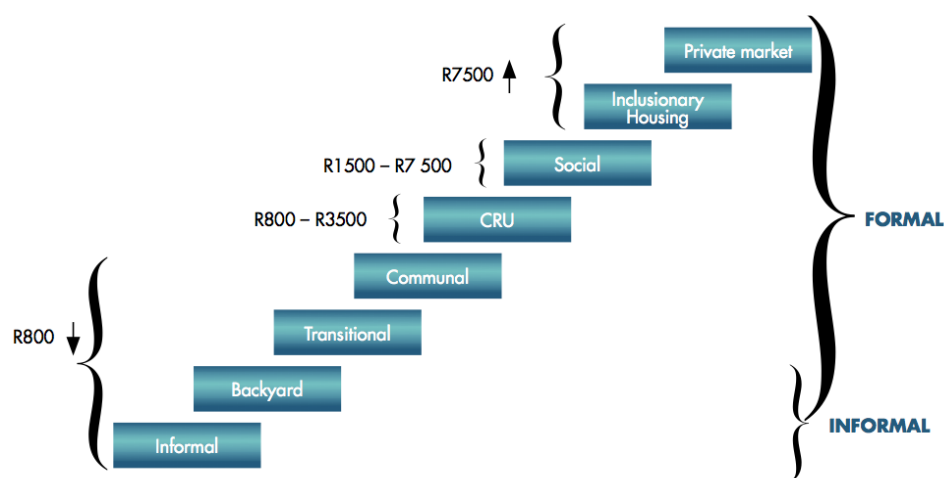
- Delivery continues to take the form of peripheral, mono-functional development implemented by large contractors. Backlogs and demand for housing projects continue to grow, often in remote locations. Beneficiaries rent out or even sell their state-funded houses, and move back into shacks in informal settlements. Weak engagement with municipalities and communities persists - although the UISP envisages municipalities as developers in informal settlement upgrading, this has so far not taken place at scale.
- The glaring disparities in socio-economic living conditions in the province's rural settlements (e.g. golf estates juxtaposed with shack areas), emerges as a fundamental challenge that needs to be addressed. Informal settlement is a notable feature in those towns that have attracted a large influx of work seekers and there is a lack of addressing the on and off-farm settlement needs of farm workers and dwellers as well as residents of forest villages, whom are often impoverished and particularly vulnerable. To date they have not benefitted substantially from government's housing subsidy, and for many their tenure remains tenuous.
- Increasingly fragmented settlements with isolated / peripheral, mono-functional dormitory townships with poor services and low levels of economic opportunity are continuously developed. Under-utilised land within settlement footprint with well located vacant and under utilised public land is not being used to deal with integrated development. Inadequate consideration has been given to resource use efficiency, such as design and building methods. Well-

located land is in short supply, in private ownership or difficult to access/package.

- Single income group / uniform form of delivery generates single income ghettos limiting socio-economic integration and cross-subsidisation. Poor layouts and siting of units limit the long term flexibility and consolidation of housing stock over time. Lack of consideration of the quality of the public environment therefore persists while high densities and overcrowding within homes and intensive occupation of backyards in areas without adequate service capacities to enable formalisation of these. High vulnerability also exists to risks such as fire, flood and pollution of ground and water source.



FIG.1.34 ZOLANI TOWNSHIP OUTSIDE ASHTON



MONETARY FIGURES REFLECT MONTHLY HOUSEHOLD INCOME

TABLE.1.23 THE RENTAL HOUSING LADDER

Municipality	Population size	Number of households	Household income		Housing demand	
			<R1 600	R1 600 – R3 200	Total	Rental specific
City of Cape Town	3 497 000	902 000	22%	14%	306 800	Not available
George	136 500	42 800	28%	18%	14 900	1 700
Knysna	65 000	17 400	22%	21%	11 500	Not available
Mossel Bay	118 000	28 000	29%	18%	9 000	Not available
Breedde Valley (Worcester)	134 000	36 500	24%	25%	13 500	5 000
Overstrand (Hermanus)	74 500	22 000	27%	14%	10 200	3 060
Stellenbosch	200 500	36 400	24%	12%	19 800	15 840
Drakenstein (Paarl & Wellington)	217 000	51 600	21%	18%	40 000	20 000

Compiled from various sources and interviews

TABLE.1.24 RENTAL DEMAND IN LEADER TOWNS



FIG.1.35 NEIGHBOURHOOD SCALE - HERMANUS ZWELIHLE 2002 RDP PROJECT - RED INDICATING MAJOR INCREASE OF INFORMAL SETTLEMENT DUE TO BACKYARD DWELLINGS THAT HAVE EMERGED IN JUST 10 YEARS

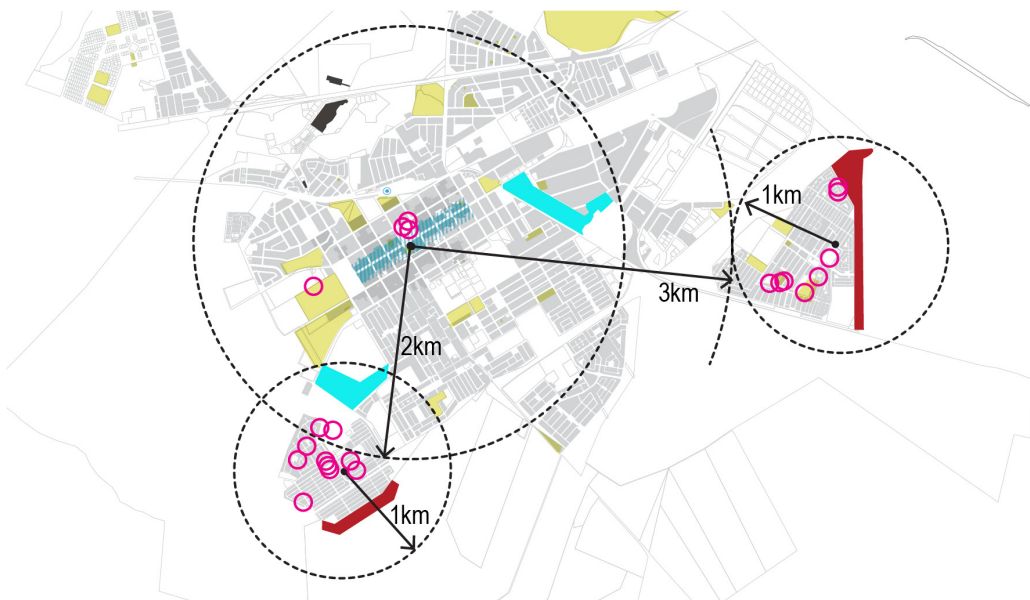


FIG.1.36 TOWN SCALE CHALLENGES - NEW HOUSING PROJECTS IN WORCESTER LOCATED ON THE PERIPHERY WHILST VACANT STATE-OWNED LAND EXISTS CLOSER TO THE CENTRE



FIG.1.37 VACANT LAND VS. SPRAWLING URBAN GROWTH IN VREDENBURG

1.5.2.5 SPATIAL CONFIGURATION OF LAND USE & DENSITY

- Currently economic activities are uneven between towns and peripheral townships. A lack of diverse activities and land uses persists in the rural regions of the Province. The 2010 GPS study found that 36% of Western Cape settlements have a dormitory function. The lack of an economic base for settlements in the interior and arid parts is precipitating the deterioration of settlements and triggers both permanent and periodic rural – urban migration. Conversely, population growth has been rapid in rural settlements in the province's intensive farming areas that use seasonal labour. Already, travel costs for poor communities within rural settlements are unaffordable, and these dormitory settlements are increasingly trapping people in space.
- Low density peripheral development around towns exacerbates land use, social facility, service infrastructure and transport inefficiencies. While housing projects are pushed to the periphery as a result of land availability, well-located public land is being put out to the highest bidder
- Increasingly inefficient and mono-functional land uses are developed including gated estates, dormitory suburbs, shopping malls and office parks. Decentralised commercial and office development is dissipating economic activity and contributing to the decline and erosion of mixed use urban cores and main streets.
- Rigid zoning schemes, based on outdated American planning models, limit the achievement of worthy policy objectives stated in SDFs at all scales.



FIG.1.38 MONOFUNCTIONAL DECENTRALISED ACTIVITIES SUCH AS THE WESKUS MALL IN VREDENBURG NEGATIVELY IMPACT ON DIVERSITY AND RANGE OF AVAILABLE ACTIVITIES

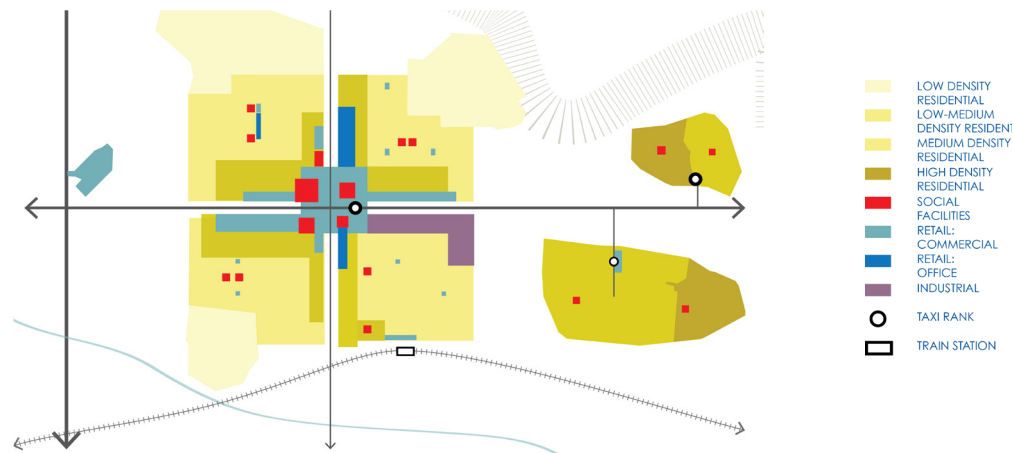


FIG.1.39 AT A TOWN SCALE IT IS EVIDENT IN MOST TOWNS THAT GREATER FACILITY CLUSTERING TAKES PLACE WITHIN THE HISTORIC TOWN WITH LACK OF ACTIVITIES IN NEW TOWN DEVELOPMENTS

1.5.2.6 SPATIAL CONFIGURATION OF FACILITIES & SERVICES

- The distribution and quality of social services is uneven between town centres and peripheral townships. Scattered facilities increase the need to travel rather than decrease it, although the roll out of the Thusong Centres is starting to address this.
- Small rural towns, villages and hamlets are difficult and costly to service. Mobile services are irregular and does not align with rural population densities or availability of support and access.
- There is little to no connection between public facilities, town structure and community - contributing to the separation of activities and lack of structural logic. This separation of activities has translated into a

separation of facilities and amenities, while exacerbating inaccessible, fragmented settlement patterns.

- The huge, often under-utilized, tracts of land that school buildings centrally sit on in turn contributes to poor spatial environments. The catalytic potential of facilities to support community cohesion, sense of ownership and place-making has not been realised due to lack of coordination, poor design and layout along with mono-functional land uses and densities that are too low to achieve sustainable thresholds of support within walking distance.
- In 19 years, the spatial requirements of schools and their site sizes have not changed and most schools and hospitals are monofunctional. These monofunctional, stand-alone buildings are also incredibly

hard to change over time. Most schools are only used between the hours of 8am-3:30pm, 5 days a week and roughly 200 days a year. They are public buildings that are expensive to maintain and are not optimised for diverse public utilisation

- According to the Equal Education Organization survey 1 in 4 children have security issues associated with schools. This is due to vast open spaces and inefficient fencing and barriers which often surrounds these facilities.



FIG.1.41 SCHOOL IN BONGOLETHU OUDTSHOORN - SURROUNDED BY FENCES LEADING TO DANGEROUS AND UNDERUTILISED SPACE



FIG.1.40 VERGESIG PRIMARY SCHOOL IN PANORAMA, ROBERTSON, SURROUNDED BY VACANT LAND WITH MINIMAL ACCESS

1.5.2.7 ACCESSIBILITY

- Continued spatial patterns of segregation and exclusion are impacting on the affordability of transport. The absence of public transport systems servicing rural communities and settlements fundamentally constrains socio-economic development. Addressing this need is particularly challenging in the remote rural areas.
- Small towns have been isolated by the disuse of the passenger railway lines, with many thus left "tussen pad en spoor" leaving them difficult and expensive to service with public transport, while disconnected, stratified low opportunity-high cost suburbs, estates and townships are continuously being built with limited transport connections to wider systems and opportunities.



FIG.1.42 WORCESTER - SETTLEMENTS LOCATED ON THE PERIPHERY OF TOWN AND REMOTE FROM ECONOMIC OPPORTUNITIES AND HIGH ORDER SOCIAL FACILITIES (HOSPITALS, HIGHER EDUCATION ETC)

- Historical core areas are typically well connected with permeable street grids, facilitating pedestrian and bicycle accessibility (NMT), whereas townships are typically laid out on the basis of outdated road access hierarchies suited to vehicular access but unsuited to NMT. Thus new developments are often designed based on non-linear cul-de-sac street layouts which limits legibility and local accessibility



FIG.1.44 LIMITED POINTS OF ACCESS IN A NEW NEIGHBOURHOOD IN GEORGE



FIG.1.46 PRIVATE VEHICLE-ORIENTATED LAYOUT IN A NEIGHBOURHOOD IN VREDENBURG

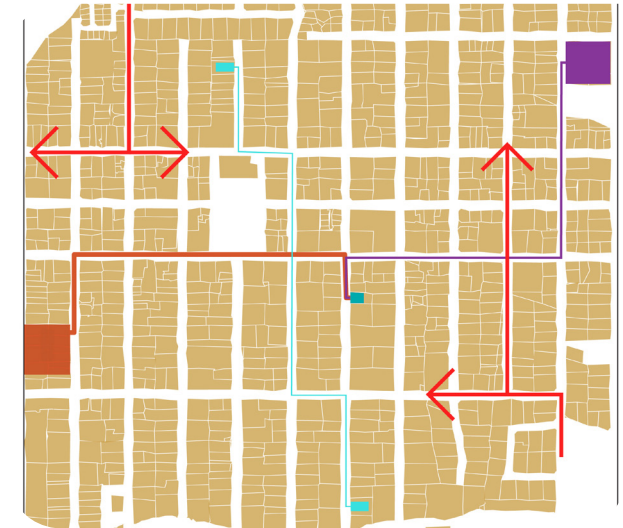


FIG.1.43 PAARL - HISTORIC GRID = GOOD ACCESS. DIRECT AND FLEXIBLE ACCESS INCREASES PEDESTRIAN ACCESSIBILITY & LEGIBILITY

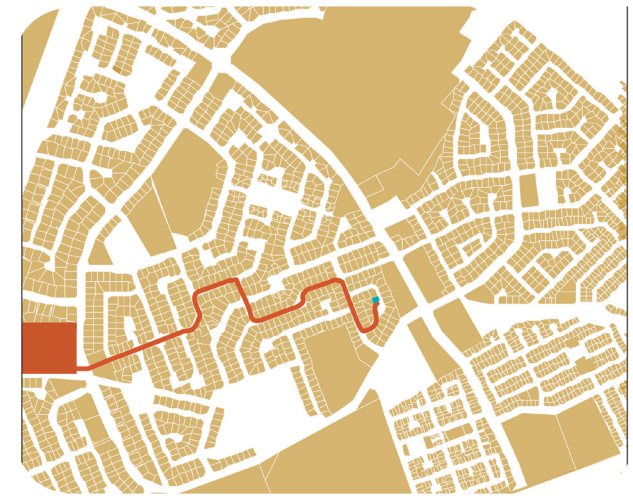


FIG.1.45 PAARL - NEW GRID = IRREGULAR ACCESS. CONVOLUTED ACCESS REDUCES PEDESTRIAN & BICYCLE ACCESSIBILITY & LEGIBILITY

1.5.2.8 SETTLEMENT IDENTITY AND SENSE OF PLACE

The Western Cape possesses numerous conservation-worthy historical settlements, from major urban centres and towns to small villages and hamlets. Historical settlement chronology spans the mid-17th, 18th, 19th and 20th centuries across the Province.

Distinctive settlement distribution and typologies have developed in response to environmental conditions, historic patterns of subdivision and built forms. These settlement typologies typically relate to their rural and agrarian contexts, such as the Montagu river farmlands or Baardskeersbos agricultural allotments. A distinctive characteristic of the Karoo and southern cape districts are the amount of numerous small 19th century agricultural hamlets established either around a church, such as Genadendal, or by the clustering of farmsteads and cottages along river courses, such as Vermaaklikheid.

In the Western Cape the following cultural heritage assets are protected:

- Archaeological and palaeontological sites
- Sites of political struggle
- Sites of living heritage such as Ratelgat
- Historical settlements such as Prince Albert, Paarl, Wellington, Stellenbosch, Franschhoek and Montagu
- Approximately 2500 declared Provincial and National Heritage Sites – 25% of these are within the Cape Metropolitan Area

Heritage surveys of Drakenstein, Overstrand and Prince Albert are the only surveys undertaken since the implementation of NHRA as endorsed by HWC. Simultaneously, an over-reliance of EIAs and HIAs persists, leading to re-active instead

of pro-active protection. Very few Conservation Areas and Heritage Overlay Zones have been implemented at a local authority level since NHRA of 1999. Spatial Development Frameworks are often too vague and general with respect to heritage issues, tending to be limited to desktop surveys, while integrated Zoning Schemes tend to assume that 'one size fits all' which can destroy the fabric of small towns and villages.

The approval of building plans prior to HWC approval continues, which is contrary to the National Building Regulations and Building Standards Act, which requires that no building plan may be approved unless all other applicable laws have been fulfilled.

A number of gated developments have been approved for areas outside of the urban edge, especially in the Stellenbosch, George & Knysna Municipalities. These areas are also home to high value cultural and scenic landscapes - therefore implying that there is a trend to allow for development in areas sensitive to transformation and visual impact.

The possible association of the vernacular environment indicates that poverty in rural areas often lead to "modernisation" or replacement of traditional dwellings as well as inappropriate infrastructural upgrades, which has also negatively impacted on the heritage value of these settlements.

Essential built-natural relationships that define the character of settlements and landscapes, such as river corridors, agricultural landscapes etc., are being undermined by poorly located development and poor settlement layouts.

Additionally, 75 historical settlements, towns, villages and hamlets worthy of protection are not currently protected (as identified

by Oberholze and Winter, 2013) and are threatened by:

- Poverty and lack of maintenance
- Insensitive new suburban and affordable housing extensions
- A lack of sense of place due to minimal public space and quality environments
- Infrastructural upgrades within historical settlements, such as over engineered road treatments, interruption of leiwat and random placement of facilities

Insensitive development is eroding important heritage streetscapes in many of the Western Cape's settlements through loss of heritage buildings, development of parking spaces and inappropriate building forms. Other activities negatively impacting on settlement morphology include:

- Consolidation of settlement blocks which disrupts the historical grain of neighbourhoods
- Street widening and inappropriate building placement, often associated with car parking lots
- Inappropriate building scale and façade treatment
- Removal of historical landscaping and planting that is inherent to the settlement's cultural landscape



FIG.1.47 GATED COMMUNITY WITH NO SENSE OF LOCAL CHARACTER



FIG.1.50 GOLF ESTATES IN THE CAPE WINELANDS IMPACTING ON THE LANDSCAPE QUALITY

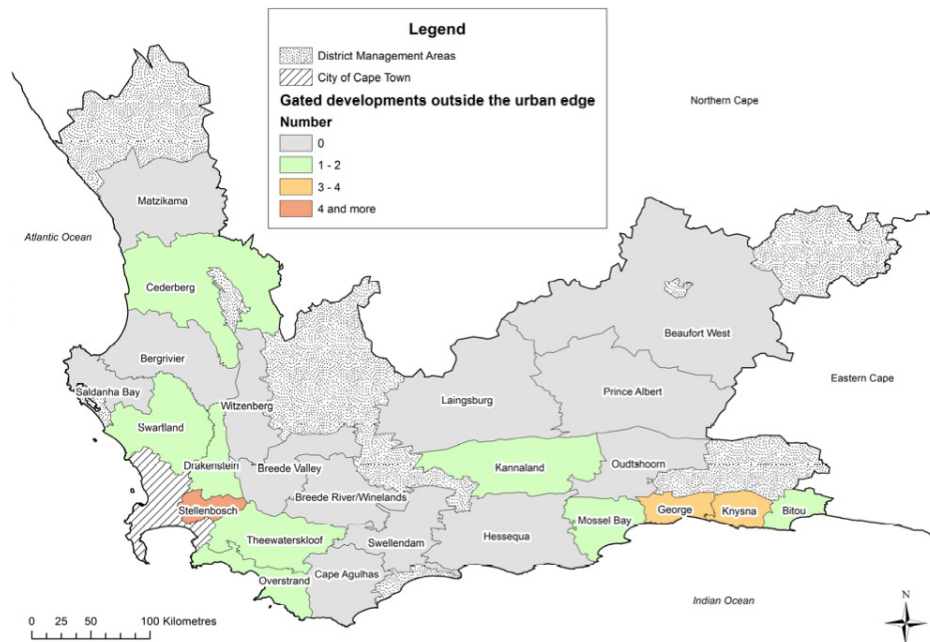


FIG.1.49 DISTRIBUTION OF GATED DEVELOPMENTS LOCATED OUTSIDE OF THE URBAN EDGE (M. A. SPOCTER 2013)



FIG.1.48 MODERN RETAIL IN HISTORIC BUILDING IN CALEDON - NEGATIVELY IMPACTING ON THE VISUAL FACADE AND HISTORIC CHARACTER OF THE BUILDING



FIG.1.52 THE DEGRADATION OF HISTORIC BUILDING FACADES IS TAKING PLACE IN THE HISTORIC CENTRE OF OUDTSHOORN



FIG.1.51 EXTERNAL BLOCK TOILETS IN WUPPERTAL - SPOILING HISTORICAL FRONTAGES

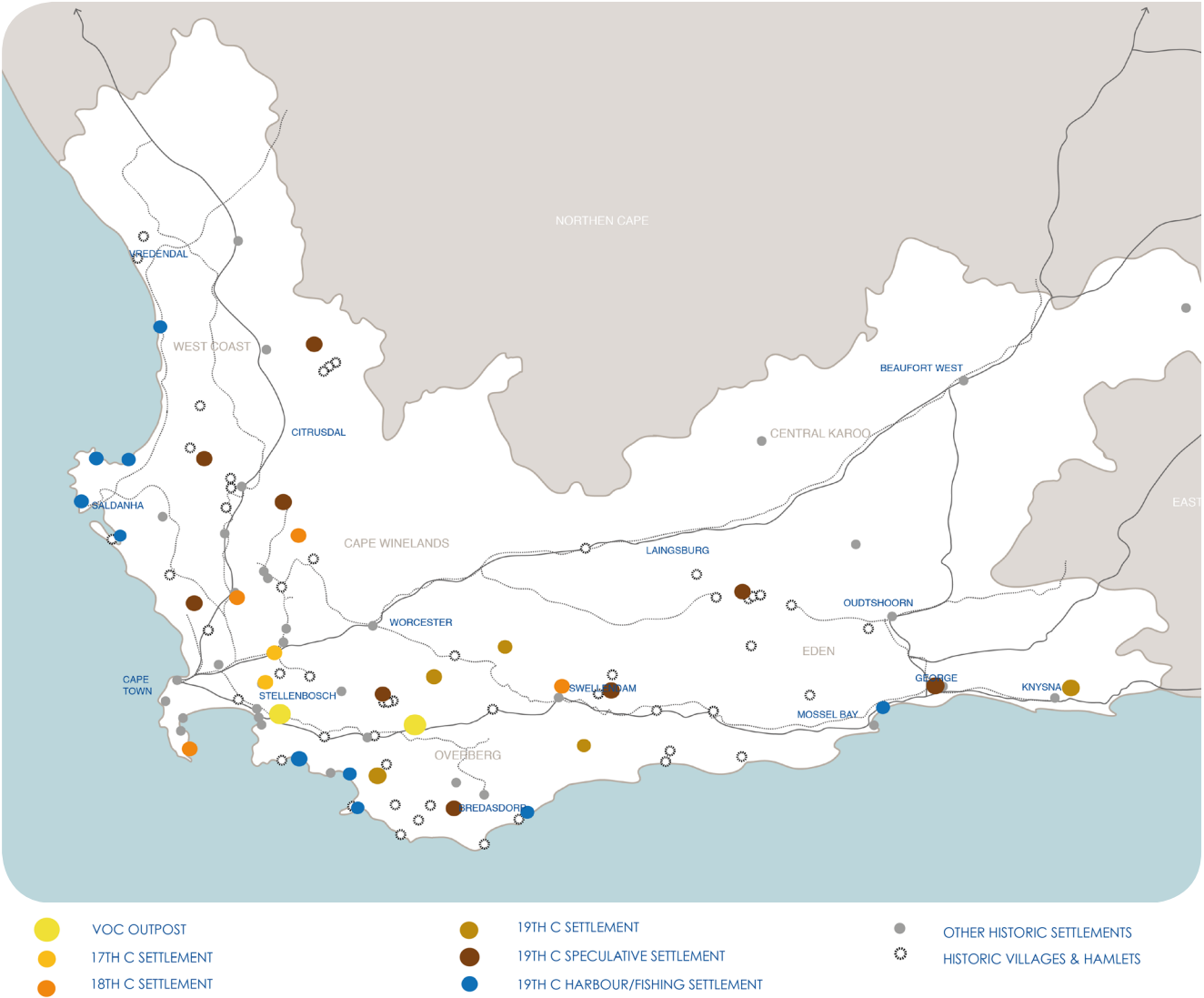


FIG.1.53 WESTERN CAPE PROVINCE - THE CHRONOLOGY OF HISTORICAL SETTLEMENTS IN THE WESTERN CAPE

ANNEXURE 2

LEGAL FRAMEWORK

TABLE.2.1 THE TABLE BELOW SETS OUT THE RELEVANT REFERENCES TO THE LEGAL CONTEXT WITHIN WHICH THE PSDF FUNCTIONS.

1. SPATIAL PLANNING AND LAND USE MANAGEMENT ACT (SPLUMA)		
1.1	Section 17(2)	All provincial development plans, projects and programmes must be consistent with the PSDF. Internally this places an obligation on all WCG departments to ensure that all development plans, projects and programmes are consistent with the PSDF.
1.2	Section 17(3)	The PSDF cannot confer on any person the right to use or develop any land.
1.3	Section 42(1)(b)	SPLUMA determines that in considering and deciding a land use application a Municipal Planning Tribunal MUST make a decision which is consistent with the following: • norms and standards, • measures designed to protect and promote the sustainable use of agricultural land; • national and provincial government policies; and • the municipal spatial development framework Whereas SPLUMA in Section 22(2) provides for instances where a Municipal Planning Tribunal may deviate from the provisions of a municipal SDF, no such deviation is provided for in relation to the other aspects referred to above, including the PSDF in so far as it is a provincial policy document. This places an obligation on Municipal Tribunals, officials dealing with applications and Councils to take into account and consider the provisions contained in the PSDF in all land use decisions.
1.4	Section 22(3)	The Premier must resolve inconsistencies between the PSDF and any MSDF through the IGR Act. Read together with the identified sections below of the Municipal Systems Act - this legislation places an obligation on the WCG to ensure that municipal and provincial SDF's are aligned and consistent with each other.
2. MUNICIPAL SYSTEMS ACT (MSA)		
2.1	Section 25(1)(e) and 26(d)	The IDP and therefore also the SDF, of a municipality MUST be "compatible with provincial development plans and planning requirements binding on the municipality in terms of legislation". In terms of these sections an obligation is again placed on both municipalities as well as the WCG to ensure that these documents are aligned and consistent with each other and should be read together with the similar obligation in Section 22(3) of the SPLUMA.
2.2	35(1)(c)	A municipal IDP binds all other persons to the extent that those parts of the IDP plan that impose duties or affect the rights of those persons have been passed as a by-law. Although a similar provision has not been included for the PSDF, it is of course also available to the WCG to elevate certain elements of the PSDF to legislation which would then also have a similar binding effect on all persons. The WCG would only consider such measures when its monitoring and support activities identifies the need therefore.

2. MUNICIPAL SYSTEMS ACT (MSA)

2.3	Section 35 (2)	Once elements of the PSDF have been elevated to legislation as described above, this section of the MSA determines that the IDP “binds the municipality in the exercise of its executive authority, except to the extent of any inconsistency between a municipality’s integrated development plan and national or provincial legislation, in which case such legislation prevails”
2.4	Sections 32 and 33	The obligation of the WCG to ensure that the SDF’s of municipalities are aligned and consistent with the PSDF is supported with the provisions in these sections in terms of which the Provincial Minister is given an opportunity to participate in the Municipal SDF and if not successful in its endeavours to achieve the required alignment, can call into action the Ad Hoc committees to resolve the dispute or inconsistency.

3. WESTERN CAPE LAND USE PLANNING ACT (LUPA)

3.1	Sections 53 to 57	These sections deal with the provincial approval of land development applications as a separate approval from that of the municipality for developments that may have a provincial impact. The role of the PSDF and more specifically the Provincial Regional SDF’s that will flow from the PSDF is to identify and define those areas and developments that would require approval in terms of these sections in LUPA.
3.2	Section 16(1)(a)	The PSDF initially was approved as a structure plan terms of section 4(6) of the LUPO, but in terms of this section remains in force and is regarded as the provincial spatial development framework adopted in terms of section 4(1). This transitional arrangement will ensure that the current document will automatically have the status of the PSDF with the implementation of LUPA.
3.3	Section 19	In this section the terminology “compliance” and “consistency” with, and “deviation” from, spatial development frameworks are defined, which forms the basis for the way in which decision takers, applicants, developers and the public will use SDF’s.
3.4	Sections 49(a) and 55(c)(i)	These sections determine that when a municipality or the Head of Department as the case may be, considers and decides on a land use application, the municipality or the Head of Department MUST have regard to the PSDF.

4. NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

4.1	Regulation 8 of the NEMA Regulations	The need and desirability requirement of the NEMA Regulations places an emphasis on the strategic context of a proposed development which is best found in the area’s SDF as well as the PSDF which is applicable to the entire province. In evaluating EIA’s it is a legal requirement to consider the need and desirability of a proposal and without considering the consistency of any proposal with the proposals contained in the PSDF such need and desirability evaluation would be incomplete.
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5. PROMOTION OF ADMINISTRATIVE JUSTICE ACT (PAJA)

5.1	Section 6(2)	PAJA determines that a court or tribunal has the power to judicially review an administrative action if the action was taken because relevant considerations were not considered. Both SPLUMA and LUPA clearly determine that the PSDF MUST be considered in land use applications and therefore a decision of a municipality of the Minister can be set aside by a court if it can be shown that provisions contained in the PSDF were not considered.
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ANNEXURE 3

SETTLEMENT TOOLKIT

Settlement Morphology and Sense of Place

Globally, it is recognised that a strong and positive sense of place and identity is a key ingredient in economic competitiveness as well as human wellbeing. The WCG seeks to protect and enhance the heritage, landscape and cultural assets of the Province to enhance their tourism and economic as well as social and cultural potential. Settlement location, extent and form as well as rural land uses must respond positively to the Western Cape's distinctive and unique landscape and settlement typologies.

The impacts of development on tangible as well as intangible heritage resources must also be acknowledged, respecting all aspects of cultural significance and diversity as well as different interpretations of history and heritage values.

MUNICIPAL SCALE

- Protect Scenic routes, retain view-lines and vistas and prioritise infill, intensification and redevelopment within settlements to avoid encroachment into surrounding scenic landscapes or sites of visual significance
- Insist on visual impact assessments to argue for development alignment with local sense of place
- Protect all identified provincial heritage areas and cultural landscapes (as identified per Oberholze and Winter 2013 study)
- Avoid indiscriminate or inappropriate forms of development through recognising historical settlement typologies
- Avoid large-scale infrastructural developments (wind farms, transmission lines, solar energy facilities) where these disrupt historical settlements and landscape settings
- Avoid development on slopes greater than 1:4 to prevent visual scarring to historical settlement and landscape backdrops

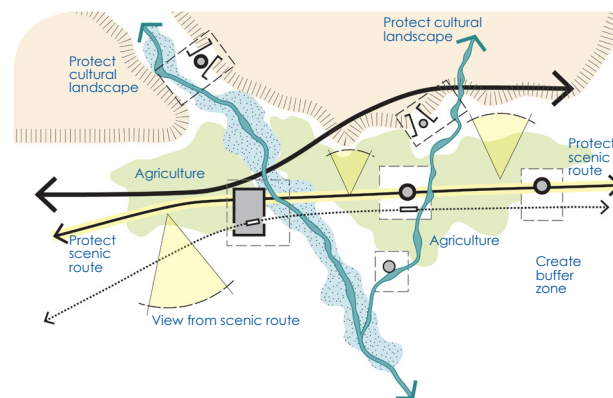


FIG.3.1 PRINCIPLES RELATING TO SETTLEMENT MORPHOLOGY AND SENSE OF PLACE APPLIED AT A MUNICIPAL SCALE

RURAL AREAS

- Protect all identified rural heritage landscapes and settlements through the provisions of NHRA
- Avoid inappropriate development in rural villages and hamlets in order to retain their sense of scale and rootedness
- Minimise urban expansion of rural areas to retain heritage elements
- Strictly control any new building development in the open countryside regarding scale, height, colour, roof profile and typology
- Retain watercourses and channels as important place-making elements and integral components of the historical regional open space network

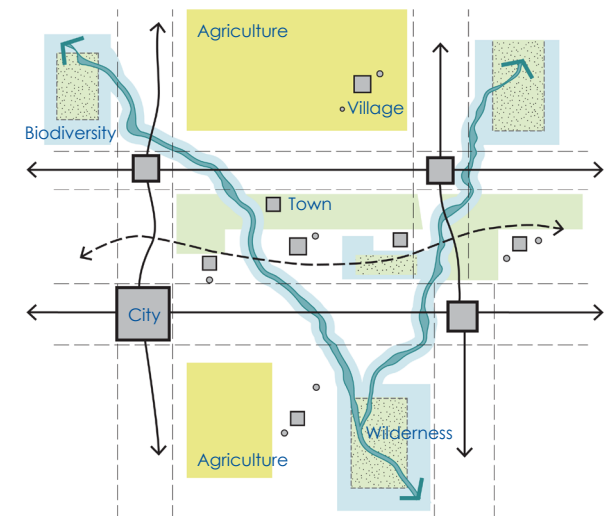


FIG.3.2 PRINCIPLES RELATING TO SETTLEMENT MORPHOLOGY AND SENSE OF PLACE APPLIED IN RURAL AREAS

TOWNS

- Retain clear settlement edges through defining limits to settlements and through establishing buffers/transitions between urban and rural
- Define non-negotiable interfaces with key place-making and resource assets
- Protect and enhance all landmarks, views and character areas (river corridors, koppies, unique vegetation, agricultural areas)
- New development within or adjacent to historical settlements should follow the grain and texture of historical patterns, including subdivision patterns, block size and shape, street setbacks, relation to open spaces and building forms.
- Avoid indiscriminate or inappropriate forms of development through recognising settlement layout types such as grid, linear, informal etc.
- Avoid “filling in” of existing green field sites of visual significance within the urban edge

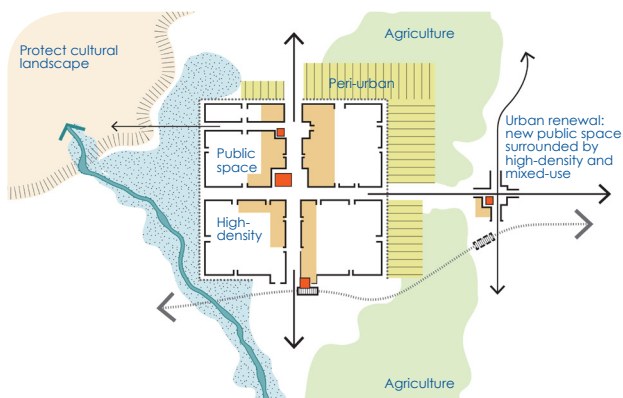


FIG.3.3 PRINCIPLES RELATING TO SETTLEMENT MORPHOLOGY AND SENSE OF PLACE APPLIED AT A TOWN SCALE

PRECINCTS

- Ensure that development in heritage contexts are appropriate in terms of scale, massing, form and architectural idiom
- Retain essential place-making elements and street hierarchy, such as the dominance of the main or high street forming the heart and connecting spine of neighbourhoods.
- Retain the patterns and types of tree planting, which reinforce the spatial qualities of historical settlements by lining streets, defining gateways and structuring open spaces
- Ensure that hard and soft landscaping complement existing character of streets and squares (such as sensitive engineering standards regarding kerb and channel treatments) and avoid disruption of ‘leiwater’ systems - essential for agricultural activities and an integral component of the historical settlement fabric
- Ensure positive building-street relationships through human-scaled setbacks from the street edge, through avoiding high boundary walls, and through limiting garages/parking along street façade
- Relax parking ratios and building lines prescribed in zoning schemes for heritage areas to retain the relationship between building and street and to allow for continuity in relation to historic streetscapes.

INDICATORS

Initiate Heritage survey
Designate heritage overlay zones for historical neighbourhoods and centres
Develop place-specific guidelines
NHRA
Oberholzer and Winter

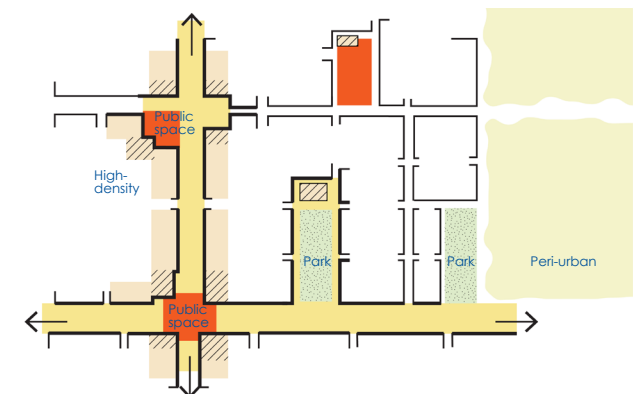


FIG.3.4 PRINCIPLES RELATING TO SETTLEMENT MORPHOLOGY AND SENSE OF PLACE APPLIED AT PRECINCT LEVEL

Accessibility

The WCG aims to make transportation systems in the Province more efficient and affordable, to create economic opportunity and to enhance access to services and opportunities. By reducing costs associated with land use, transportation and development, it becomes possible to reinvest these savings to strengthen our long-term position in the region and the world.

Related aims include providing safe alternatives to private-vehicle travelling options within the rural landscape and prioritising public transport and NMT services and facilitate the integration of all modes of transport.

To achieve these aims we need to properly align land use planning with transport planning at all scales and move towards transit-orientated development offering optimal levels of pedestrian and public transport accessibility and safety while also reinforcing urban street hierarchies through transport connectivity and diversity.

MUNICIPAL SCALE

- Improve linkages to existing regional transport infrastructure such as the rail network and primary regional transfer routes.
- Restructure road networks and encourage centralised, multi-modal municipal transport interchanges.
- Utilise public transport to promote economic activity in appropriate locations while at the same time enabling the clustering and integration of activities in proximate location of public transport interchanges.
- Ensure that all new developments are located at points of highest possible public and pedestrian accessibility.
- Align economic and social opportunities with accessibility and transport routes.

RURAL AREAS

- Align rural development with rural public transport networks
- Evaluate rural-urban commuter and shopping flows within functional regions - across municipal boundaries – to inform rural public transport networks
- Prioritise infrastructural investment and allocation of funding for paving and landscaping of non-motorised pathways, bicycle lanes and walkways for travelling between and within rural areas

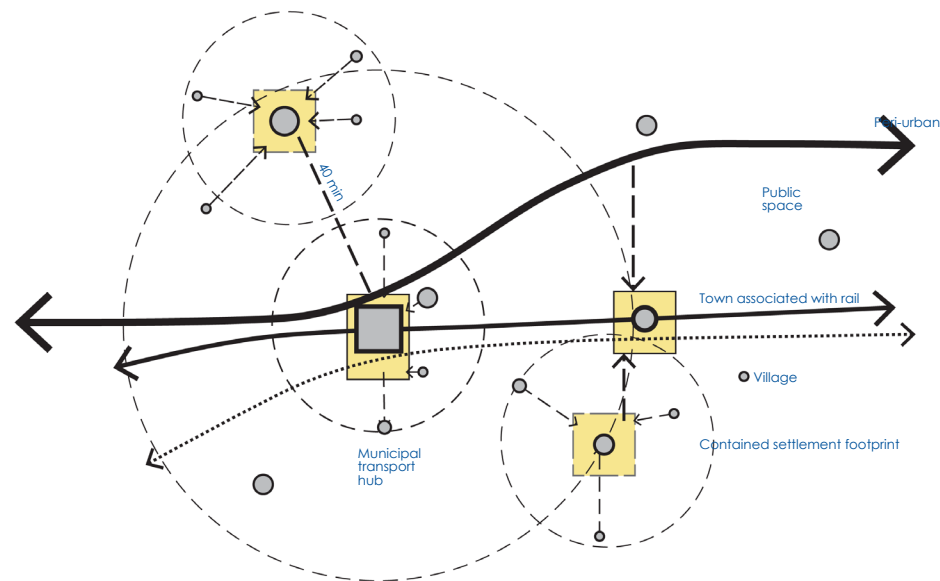


FIG.3.5 ACCESSIBILITY PRINCIPLES APPLIED AT MUNICIPAL SCALE

TOWNS

- Locate new development in accessible locations which prioritise pedestrian and public transport access, close to transport interchanges and routes
- Provide a clearly defined hierarchy of streets and public spaces with varied roles and character that provide positive social, economic and environmental spaces
- Support increased accessibility between fragmented parts of towns (towns and townships) especially for pedestrian, cycle and public transport routes and modes

A Strong town is designed with a physical layout that enhances the public realm and thus adds value to each property that fronts it. New growth and development must improve the public realm.

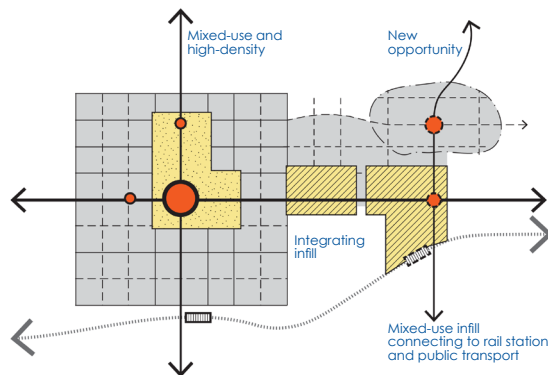


FIG.3.6 ACCESSIBILITY PRINCIPLES APPLIED AT TOWN SCALE

PRECINCTS

- Ensure that settlement layouts provide clear and direct pedestrian linkages and routes
- Avoid convoluted road networks which favour vehicular circulation
- Promote streets as multi-purpose spaces designed to accommodate all modes of transport and a range of activities
- Encourage walking and cycling by providing safe, legible and attractive environments free from traffic and ensure that these routes are edged by buildings that overlook space rather than blank walls and backs of buildings
- Manage parking so that it is used more efficiently and does not dominate the streetscapes of the town by placing it behind or to the side of the building to avoid impeding pedestrian access
- Minimise driveway widths so as to conflict as little as possible with pedestrian traffic.
- Encourage pedestrian access by placing buildings adjacent to the street with minimal setbacks (no more than 3-5 meters for commercial and mixed-use or 6-8 meters for residential), rather than behind large parking lots. Primary entrances should open to the street and be located as close as possible to transit stops.

INDICATORS

Access to and from transit stops and stations should be convenient and safe. Development standards and design guidelines that integrate transit access into the development process.

Minimize the distance between building entrances and transit stops and provide direct sidewalks between stops and building entrances.

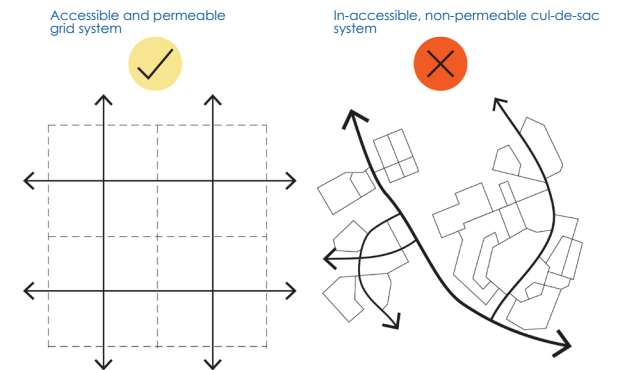


FIG.3.7 ACCESSIBILITY DESIGN CRITERIA

Activities Patterns and Land Use

The WCG aims to improve the integration and sustainability of the towns, cities, municipalities and regions within the Province. A dramatic shift is therefore required towards more compact, mixed-use settlements where it is easy to get around on foot, bicycle, or by transit. Creating these types of environments can be an effective method of improving financial and environmental sustainability as well as the increasing costs of travel. Environments that mix commercial and residential land uses and put people within walking, bicycling or mass transit distance of their destinations can reduce vehicular travel, and the costs and environmental impacts of this by 20 to 40 percent.

MUNICIPAL SCALE

- Clarify the economic role and function of towns within a municipality or region to establish a clear settlement hierarchy to guide investment and planning decisions
- Prioritise clustering of activities in key economic urban areas while prioritising mobile services to serve the wider region
- Optimise the spatial allocation of activity patterns and clustering as a key tool for spatial integration.

RURAL AREAS

- Diversify rural activities through optimising the potential of the green economy and its implications for rural development.
- Promote sustainable, ecologically responsible and equitable tourism and recreation activities to diversify rural economic activities (markets, historical tourism routes, hiking, camping, other eco-friendly activities)
- Facilitate the development of rural industrial activity, especially those promoting green technologies, in suitable locations and at appropriate scale

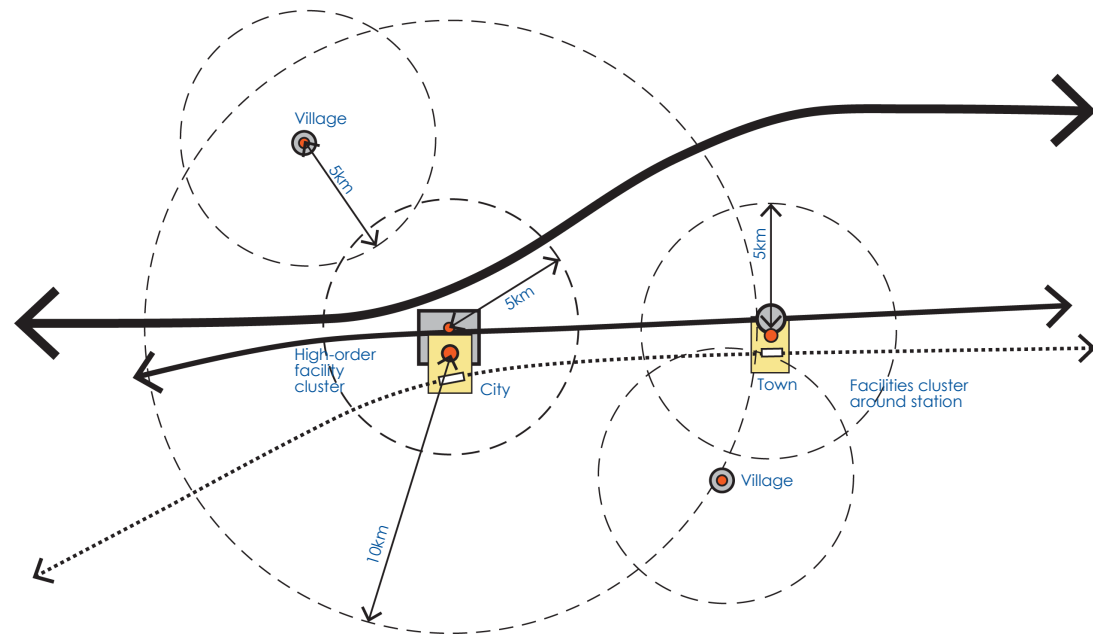


FIG.3.8 ACTIVITIES LOCATION, HIERARCHY AND CLUSTERING APPLIED AT A MUNICIPAL SCALE

TOWNS

- Create economic opportunities close to where people live to break down spatial barriers
- Increase choice and convenience through increasing the range and number of high opportunity places throughout settlements
- Create a system of community and activity destinations throughout settlements that promote clustering of services and opportunities.
- Cluster civic, business and community facilities so that they are accessible to public transport interchanges and routes and prioritise higher density mixed-use development in these areas

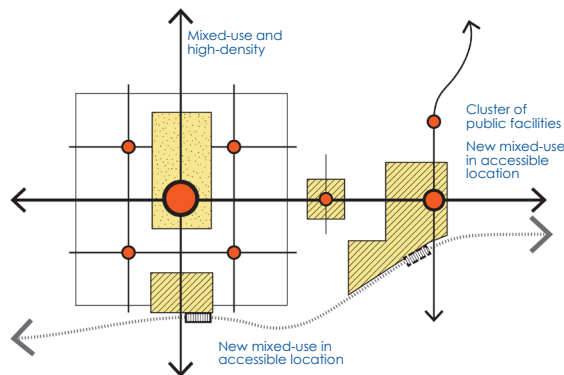


FIG.3.9 ACTIVITIES LOCATION, HIERARCHY AND CLUSTERING APPLIED AT TOWN SCALE

PRECINCTS

- Local precincts within towns must be mixed use, with properly-scaled residential and commercial development to make transportation systems more efficient and affordable, to create economic opportunity and to enhance the community.
- Ensure that all communities and neighbourhoods have access to the full range of services, amenities and opportunities
- Aim for "Neighbourhood completeness" through clustering to increase the liveability, accessibility and vitality of settlements
- Group public facilities, services and government offices to increase convenience and efficiency and align this with higher densities
- Ground floor uses facing the street should be "active" uses as much as possible (such as retail or community uses) and should be mostly transparent (e.g., windows, display cases) rather than blank walls facing the street.

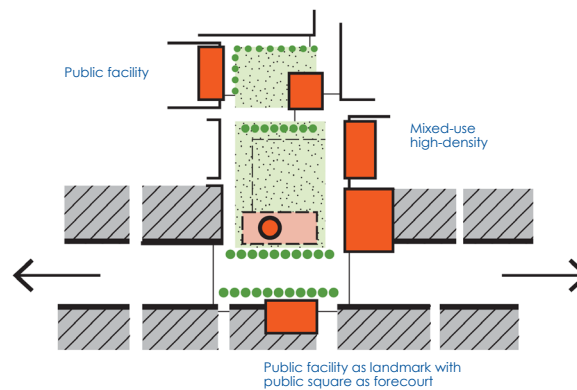


FIG.3.10 ACTIVITIES LOCATION, HIERARCHY AND CLUSTERING DESIGN CRITERIA AT A PRECINCT LEVEL

INDICATORS

Mixing of uses of development – standards.
Consider proximity to transit in performance-based zoning and development controls.

Facilities and Social Services

The WCG aims to improve the accessibility, sustainability and quality of education and health facilities across the province, balancing and rationalising the distribution of facilities in relation to need and availability of capital and operational resources.

Through their location, form and relationship with the public environment, health and educational facilities should contribute to facilitating spatial and economic integration within settlements.

MUNICIPAL SCALE

- Strategically locate and align the provision of facilities and social services with access networks as well as settlement role and local needs to ultimately increase convenience, access and viability
- Prioritise clustering of activities in key economic urban areas while prioritising mobile services to serve the wider region.

RURAL AREAS

- Expand and coordinate periodic, mobile services to establish rural service centres. Primary community facilities serving rural communities should be located within or adjacent to existing settlements, but access must be increased via mobile service centers and must be linked to market spaces or transport interchanges.
- Upgrade degraded rural facilities.

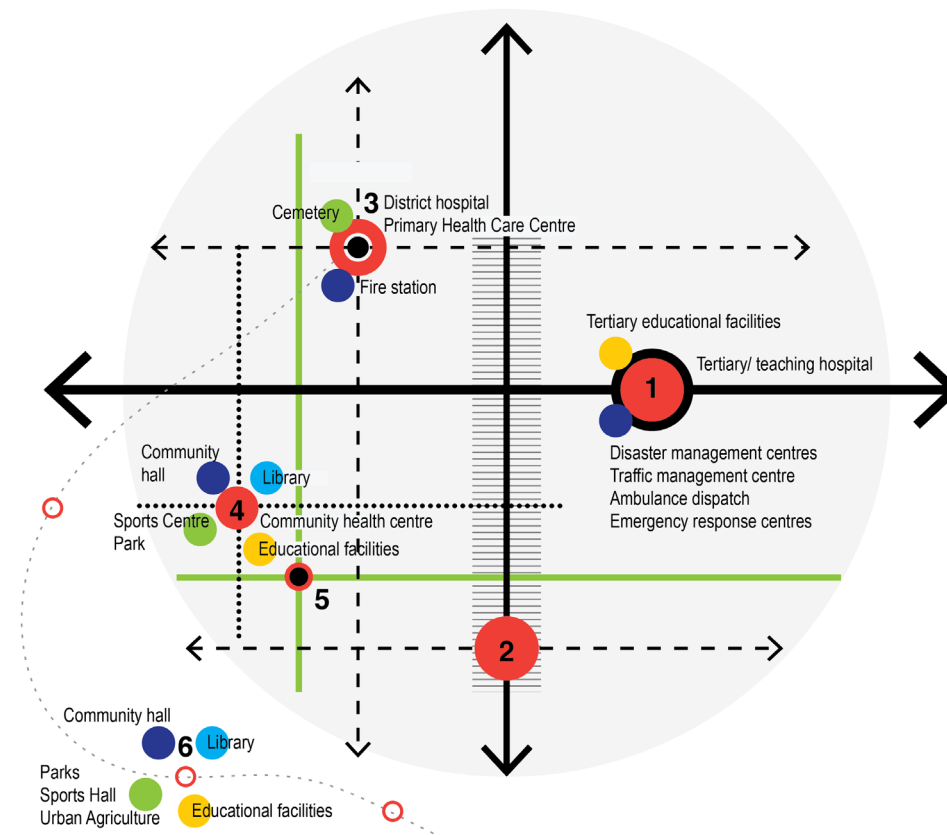


FIG.3.11 SOCIAL SERVICES LOCATION, HIERARCHY AND CLUSTERING PRINCIPLES ILLUSTRATED ACROSS VARIOUS SCALES

TOWNS

-
- The site plan shows a rectangular building footprint with various internal spaces. A dashed line indicates the building boundary. Key areas include:
- Staff Parking:** Located at the top left, with a blue arrow pointing to it from the left.
 - Classroom:** A vertical rectangular space on the left side.
 - Hall:** A large central rectangular space.
 - Admin:** A small rectangular space on the right side.
 - Library:** A small rectangular space on the right side, adjacent to the Admin area.
 - Classroom / FET:** A large rectangular space at the bottom center.
 - Sports Field:** Two large rectangular areas on the right side, each with a green dotted pattern.
 - Facility:** A rectangular area at the bottom right, shaded with diagonal lines.
 - School Forecourt / Public Square:** A yellow-shaded area at the bottom left, with a red arrow pointing to it from the left.
- Arrows indicate movement or flow: a blue arrow points from the left towards the Staff Parking; a red arrow points from the left towards the School Forecourt / Public Square; a blue arrow points from the bottom towards the Classroom / FET; and a red dotted arrow points from the bottom towards the Facility.

FIG.3.12 SOCIAL SERVICES DESIGN CRITERIAS FOR EDUCATIONAL FACILITIES

PRECINCTS

-
- Diagram illustrating the layout and access points for a Public Forecourt to Health Facility. The facility is shown as a yellow rectangular area adjacent to a larger grey building. Key features include:
- STAFF ACCESS TO PARKING (indicated by a blue arrow)
 - AMBULANCE/ EMERGENCY (indicated by a blue arrow)
 - PUBLIC RECEPTION (indicated by a red arrow)
 - PUBLIC ENTRANCE (indicated by a red arrow)
 - PUBLIC FORECOURT TO HEALTH FACILITY (the yellow area)
 - CLOSE PROXIMITY TO MAJOR PUBLIC TRANSPORT ROUTE/ STOP (indicated by a red dashed line and a black circle)

FIG.3.13 SOCIAL SERVICES DESIGN CRITERIAS FOR HEALTH FACILITIES

INDICATORS

CSIR Standards
DEADP Development Parameters

Informality, Housing Delivery, Inclusion and Urban Land Markets

The WCG is committed to improving the quality and performance of housing within the Province. Human settlements need to become more integrated and sustainable through the improved location, form and quality of new housing projects, effecting a shift from mono-functional greenfield development to densification, infill and brownfield redevelopment wherever possible.

This requires a shift from a uniform model of “housing delivery” to support for delivering housing opportunities and sustainable communities. Proactive responses to the realities of informal housing must ensure that settlements are made as accessible, safe and liveable as possible. This includes finding constructive and sustainable solutions to informal settlements, the risks associated with backyard dwellers and new migrants.

New instruments and funding criteria will be developed to facilitate more inclusionary land markets and secure and release well located land for a broader and more appropriate range and mix of subsidized and market related housing.

MUNICIPAL SCALE

- Optimise state owned land and other resources through the implementation of integrated housing projects that are sustainable, viable and diversified to facilitate settlement restructuring.
- Align investment of housing with economic growth and infrastructure capacities.
- Channel pressures for residential development to existing towns, villages and hamlets while focussing housing investment in towns with stronger economic bases
- Initiate and motivate the identification of restructuring zones at a municipal scale – aligned with functional regions and settlement roles - which promulgates infrastructure investment for housing and economic opportunities.

RURAL AREAS

- Minimise urbanisation patterns through providing sustainable rural housing opportunities while aligning such projects with land reform (to only take place in commonage and urban fringe/peri-urban areas given market and social facility proximity)
- Restrict rural residential rights to incentivise the consolidation of rural properties of high biodiversity value and their incorporation into conservation plans (Cape Nature stewardship programme)
- Promote sustainable and flexible rural housing opportunities for poorer rural communities and workers threatened by seasonal labour.
- Prevent further development of extensive residential lifestyle properties in the rural landscape - only to be established in suitable, degraded or non-scenic landscapes
- Only allow for rural housing development through eco-housing projects that accommodates sustainable building standards and investment feasibility (e.g. dwelling extent, number of units).
- The allocation of peri-urban and commonage land must accommodate agri-models for semi-subsistence and semi-commercial emerging farmers.

TOWNS

- Coordinating the release of land with housing programmes and infrastructure provision
- Develop smaller, integrated settlements within existing urban areas, through densification and infill before allowing urban expansion through new, peripheral settlements
- Provide a range of housing typologies including incremental housing, public and private rental and GAP housing
- Deal proactively with informality through prioritising incremental development and serviced land projects which focus attention on the collective elements such as social facilities, spaces and amenities while providing for emergency services and basic services (identify incremental overlay zones)

PRECINCTS

- Improve the spatial design qualities of new housing projects through improved layout and unit design and appropriate orientation of buildings
- Consider sustainable urban systems and infrastructure through green building technologies and infrastructure options
- Prioritise investment into community facilities, public infrastructure and public space rather than a single focus on housing or top structures (as per NDP)
- Encourage the development of new social housing stock and provide access to municipal rental stock, land and buildings for social housing development

INDICATORS

See Rural Planning and Management Guidelines for more (DEADP 2009)

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**Western Cape
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